

QUALITY OF SERVICE STANDARDS
FOR THE
ELECTRICITY TRANSMISSION AND
DISTRIBUTION SECTOR
2017

FINAL DECISION

October 2017

TABLE OF CONTENTS

	<u>PAGE</u>
<i>FOREWORD</i>	ii
1. INTRODUCTION	1
Purpose of this Document	1
Structure of the Document	1
2. THE GUARANTEED STANDARDS SCHEME	2
2.1 Guaranteed Electricity Standards	3
2.2 Compensatory Payments	14
3. THE OVERALL STANDARDS SCHEME	19
3.1 Overall Electricity Standards	20
4. OTHER ISSUES	26

LIST OF TABLES

Table 1	Final Decision - Guaranteed Electricity Standards	16
Table 2	Final Decision - Overall Electricity Standards	25

APPENDICES

Appendix I	New Guaranteed and Overall Standards Reporting Templates	
Appendix II	Summary of Written Responses to Consultative Document “Review of the Quality of Service Standards for the Electricity Transmission and Distribution Sector”	

FOREWORD

The Regulated Industries Commission (RIC), in its capacity as the economic regulator for the Electricity Transmission and Distribution Sector, established the Quality of Service Standards (QSS) in 2004 to ensure that T&TEC provided and maintained an acceptable level of service to its customers. The QSS was subsequently revised in 2009 and in the thirteen years that the QSS has been instituted, the RIC acknowledges the improvement in service as T&TEC sought to adhere to the standards and ensure a safe and reliable supply of electricity to its consumers and the wider public. The RIC concluded the second review of the QSS in 2017 and as part of the review process the RIC invited feedback from stakeholders, including T&TEC, over the period of six (6) weeks between July and September 2017. The responses received have been taken into consideration in formulating the revisions to the current standards.

The RIC is cognizant that customers will demand increased levels of quality of service, especially with the proliferation of highly sensitive electronic devices within the load matrix on the demand side. In this, the RIC's Final Decision document for the Quality of Service Standards for the Electricity Transmission and Distribution Sector 2017, the RIC will continue to balance the interests of both the customers and the service provider. Thus, the revisions made to the current QSS seek to address the key areas of concern for customers while at the same time being mindful of the constraints faced by the service provider.

1. INTRODUCTION

In July 2017, the Regulated Industries Commission (RIC) published for public comment its document, “Review of the Quality of Service Standards for the Electricity Transmission and Distribution Sector”. The document formed the basis of consultation with the public and other stakeholders. Section 6(1) of the RIC Act (Act) expressly empowers the RIC to prescribe standards of service, monitor to ensure compliance and impose sanctions for non-compliance. The Act also mandates the RIC to consult with all interested parties it considers as having an interest.

The RIC received four (4) written responses during the consultation period. The respondents were the Trinidad and Tobago Electricity Commission (T&TEC), the Ministry of Energy and Energy Industries (MEEI), the Consumer Affairs Division (CAD) of the Ministry of Legal Affairs and Professor Chandrabhan Sharma. A summary of these written responses is presented in **Appendix II**. The RIC wishes to express its appreciation to all of the respondents for their time and participation.

Purpose of this Document

In this document, the RIC reports on the responses received from the various stakeholders, and presents its conclusions and decisions on the Quality of Service Standards for the Electricity Transmission and Distribution Sector.

Structure of the Document

This document is divided into four sections. **Section 2** discusses the comments on both the guaranteed standards scheme and the compensatory payment mechanism and presents the final decision on both. **Section 3** discusses the comments on the overall standards scheme and presents the final decision on the overall standards scheme. Finally, **Section 4** discusses other issues raised by the respondents.

2. THE GUARANTEED STANDARDS SCHEME

The RIC reviewed the comments submitted with respect to the proposed guaranteed standards scheme. This section discusses the issues raised by the respondents with respect to the guaranteed standards and the compensation for breaches of these standards. There was no objection from any of the respondents to the continued implementation of the system of Guaranteed and Overall Standards for the Electricity Transmission and Distribution Sector.

The MEEI suggested that the service description for the Guaranteed Electricity Standard 1 (GES1) should be modified to exclude force majeure outages as stipulated in the proposed Overall Electricity Standard 1 (OES1). They indicated that T&TEC should not be held responsible for delays in the restoration of supply due to events of this nature. The RIC has acknowledged in all iterations of the QSS that interruptions caused by the failure of generation, faults of or on customers' equipment, and force majeure* conditions are outside the control of T&TEC and, as such, T&TEC is afforded the opportunity to apply to the RIC requesting that interruptions due to these circumstances be excluded from consideration in the application of all of the Guaranteed Standards. Hence there is no need to specifically state this exemption in the individual definitions of the Guaranteed Standards. Requests for exemptions have to be approved by the RIC before they can be applied by T&TEC.

The RIC's final decisions and rationales where necessary for each of the Guaranteed Standards along with the comments received from stakeholders are hereby presented. The Guaranteed Standards put forward for publication in the Trinidad and Tobago Gazette are listed in **table 1**.

* Force majeure conditions include acts of God, acts of terrorism, riot and severe weather conditions. Apart from force majeure conditions, there may be some other general conditions which may apply to all of the guaranteed standards. These have to be approved by the RIC on a case-by-case basis.

2.1 GUARANTEED ELECTRICITY STANDARDS

EXPLANATIONS AND DEFINITIONS

GES1 Restoration of Supply after Unplanned Outage on the Distribution System

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure In the event of a failure of supply to customers, the service provider must restore supply within 10 hours of the time from which it became (or should reasonably have been) aware of the fault. If it fails to achieve this, it must pay compensation of \$60 to domestic customers or \$600 for non-domestic customers, and a further \$60 and \$600 respectively for each additional period of 12 hours in which supply is not restored for a maximum of three additional periods.

GES2 Billing Punctuality. Time for first bill to be dispatched after service connection

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure The service provider must dispatch the first bill within 60 days (residential customers) and 30 days for non-residential customers after providing a new connection. If the service provider fails to dispatch the bill within the specified time, a payment of \$60 must be made to the customer.

GES3 Reconnection of Service after settling of overdue amounts or agreement on payment schedule

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final The service provider must restore service to a customer within 24 hours after the
Definition/ bill, including the reconnection fee, has been settled by the customer or an
Performance agreement on a payment schedule has been reached. If the service provider fails
Measure to reconnect within 24 hours, a payment equal to the reconnection fee must be
 paid to the customer.

GES4 Making and Keeping Appointments

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Where the service provider makes an appointment with a customer and is late for
Definition/ the appointment by one hour or longer and has failed to give 24 hours' notice of
Performance inability to keep an appointment, the service provider must pay the customer
Measure compensation of \$60.

GES5 Investigation of Voltage Complaints

Proposed Definition/Performance Measure A voltage irregularity occurs when the electricity supply is either outside the statutory voltage range or there is a variation between phases greater than $\pm 2\%$ in the case of a three-phase voltage supply. 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 the service provider must correct the problem and notify the customer of the corrective action taken within 24 hours of the report. Where a visit is deemed to be necessary, the service provider must visit within 24 hours of the report and then has 15 working days of the report to correct the problem and notify the customer of the corrective action taken. If the service provider does not evaluate, carry out a required visit or correct the voltage irregularity within the stipulated time frames, a payment of \$60 to residential customer or \$600 to non-residential must be made.

- Comments** ■ T&TEC disagreed with the proposed changes as it related to the voltage irregularities and the variation between phases greater than $\pm 2\%$. T&TEC indicated that there may be a number of factors which would have to be assessed in the event of an imbalance in the phase voltages of a three-phase voltage supply before the issue can be rectified. Therefore, the time prescribed by the RIC to correct the problem may be insufficient and would also vary on a case by case basis.
- The CAD agreed with the proposed change and viewed it as satisfying the reasonable expectation of all types of consumers for consistent voltage supply including commercial consumers who would be more dependent on the three phase voltage.
 - The MEEI agreed with the proposed change, however, indicated that the RIC should specify whether it will continue to lobby on behalf of the client for damaged equipment claims or if only the time margins set for GES5 for compliance for response and resolution will be utilized.

RIC's Decision and Rationale The RIC notes that the timely rectification of variations between phases in the case of a three-phase voltage supply has become very important for customers critically affected by voltage imbalances and was guided by 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 RIC accepts T&TEC's view that this issue may require a variable amount of time to facilitate a thorough investigation and rectification of a complaint and thus will amend the standard to allow for T&TEC to have greater latitude to treat with voltage imbalances. The RIC wishes to indicate that there is the Damaged Appliance Policy which specifically applies to instances of damaged appliances whereas GES5 will apply to instances of voltage irregularities.

Final Definition/ Performance Measure A voltage irregularity occurs when the electricity supply is either outside the statutory voltage range or there is a variation between phases of a three-phase voltage supply in which a customer's equipment may not operate or may become damaged in the worst case.

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 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 to be necessary, the service provider must visit within 24 hours of the report and then has 15 working days of the report to correct the problem 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. In instances where 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.

GES6 Responding to Billing and Payment Queries

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure The service provider must respond to a customer's billing and payment queries within 15 working days with a substantive response. If the service provider fails to respond, a payment of \$60 must be made to the customer.

GES7 Execution of Capital Works and New Connection of Supply

Proposed Definition/ Performance Measure **Simple connections:** - For connections that will require no construction works on the part of the service provider.

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 works¹ as directed by the service provider and submitted all payments and documentation, including a valid certificate of inspection from the Electrical Inspection Department of the Government within 3 working days. This requirement will also apply from a date mutually agreed upon between the service provider and the customer that extends beyond the 3 working days.

Complex connections: -

- 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 all documents being provided by the customer.
- B. 3. The service provider must complete the construction of augmentation works within 15 working days of submission of any required payments and agreements signed by the customer.
- B. 4. The service provider must complete the new connection of supply after submission of all payments and documentation, including a valid certificate of inspection from the Electrical Inspection Department of the Government within 3 working days. This requirement will also apply from a date mutually agreed upon between the service provider and the customer that extends beyond the 3 working days.
- 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 all documents being provided by the customer.

¹ 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.

- C. 3. The service provider must complete the construction of augmentation works within 20 working days of submission of any required payments and agreements signed by the customer.
- C. 4. The service provider must complete the new connection of supply after submission of all payments and documentation, including a valid certificate of inspection from the Electrical Inspection Department of the Government within 3 working days. This requirement will also apply from a date mutually agreed upon between the service provider and the customer that extends beyond the 3 working days.
- D. 1. The service provider must complete a preliminary survey for industrial customers, within 3 working days of the request.
- D. 2. The service provider must provide the estimate of costs within 15 working days of 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 and submission of any required payments and agreements signed by the customer.
- D. 4. The service provider must complete the new connection of supply after submission of all payments and documentation, including a valid certificate of inspection from the Electrical Inspection Department of the Government within 3 working days. This requirement will also apply from a date mutually agreed upon between the service provider and the customer that extends beyond the 3 working days.

If the service provider fails to fulfil the aforementioned obligations, a payment of \$60 must be made to residential customers and \$600 to non- residential customers.

Comments ■ T&TEC recommended changes to the number of working days for the following requirements:

- C.3 – 30 working days instead of 20 working days
- D.1 – 15 working days instead of 3 working days
- D.4 – 5 working days instead of 3 working days

In the case of requirement (C.3), T&TEC indicated that the time needed to complete construction works varies depending on the amount of infrastructure that has to be installed, the magnitude of the modification to the existing network that is required while also ensuring that supply interruptions to facilitate construction works do not place an undue burden on the existing customers. For requirement (D.1), T&TEC indicated that more than one department is involved in the process of examining the request for a new industrial connection and the process entails detailed examination of the modifications that may have to be made at both the Distribution and Transmission networks. For requirement (D.4), T&TEC indicated that the final connection may require an outage to a significant number of customers that would require adequate outage notification.

- The CAD agreed with the proposed change and viewed it as necessary given the complaints of consumers and would therefore be reasonable in meeting the goal of the standard.
- The MEEI agreed with the proposed change and recommended that RIC consult with T&TEC to establish a baseline for duration of similar projects, work breakdown structure and scheduling if this has not already been done.

RIC's Decision and Rationale **The RIC stands by its intention to address the concern of customers with respect to the inordinate delays in the completion of the surveys for new connections, the estimation of costs and the construction of additional infrastructure (network augmentation works) and has made adjustments to the requirements (C.3, D.1 and D.4) in order to address T&TEC's concerns.**

Final Definition/ **Simple connections:** - For connections that will require no construction works on the part of the service provider.

Performance Measure 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 works² 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 will also apply from a date mutually agreed upon between the service provider and the customer that is beyond the 3 working days.

Complex connections: -

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 the completed survey and all documents being provided by the customer.

B. 3. The service provider must complete the construction of augmentation works 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 will also apply from a

² 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.

date mutually agreed upon between the service provider and the customer that is beyond the 3 working days.

- 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 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 will also apply from a date mutually agreed upon between the service provider and the customer that is beyond the 3 working days.
- D. 1. The service provider must complete a preliminary survey for industrial customers, within the time frame 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 will also apply from a date mutually agreed upon between the service provider and the customer 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 customers and \$600 to non-residential customers for each breach of a requirement of the standard.

GES8 Payments owed under Guaranteed Standards

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure Compensatory payments must be credited to the customer’s bill within 30 working days for non-residential and 60 working days for residential customers for automatic payments guaranteed under GES2 to GES7 and for claims accepted by the service provider under GES1 (until payment is made automatic under this standard). If the service provider fails to credit a payment within the specified timeframe, an additional payment of \$60 must be made to the customer. The timeframe will be suspended pending the RIC’s deliberation of a formal request by T&TEC to exclude an instance of non-compliance from consideration. The stipulated timeframe will then resume upon receipt of official correspondence indicating that the RIC has determined that T&TEC must treat the matter as a valid instance of non-compliance by T&TEC.

2.2 COMPENSATORY PAYMENTS

The RIC invited comments on whether it was appropriate to set differing payment levels for the different categories of customers and what method should be used to determine payment levels going forward and how frequently should this review occur?

- Comments** ■ T&TEC questioned why the RIC saw it necessary to propose the penalty fee increase from \$50.00 to \$60.00 for residential customers for all of the Guaranteed Standards.
- The CAD was in agreement that different payment levels should be set for different categories of customers as they would experience different levels of losses. They indicated that the method currently used is reasonable and suggested that another method that could be used is a percentage of the usual loss incurred to the consumer during the various scenarios. They indicated that review of compensatory payments should take place every five years at maximum.
 - The MEEI indicated that if the non-residential category is intended to include commercial and industrial customers, then in the case of a normal unplanned outage, these customers may suffer a financial loss much greater than the levels of compensation outlined for GES1. Furthermore, they recommended that the manner in which the compensation for GES1 will treat with clients whose businesses are at their homes should be clarified.
 - The MEEI suggested that commercial and industrial customers should be compensated for GES1 according to:
 - The percentage of hours of service at justified rates. Commercial customers (small and medium scale businesses only) should be reimbursed at a higher percentage than industrial customers.
 - The percentage of contracted production loss and loss of perishables. Commercial customers (small and medium scale businesses only) should be reimbursed at a higher percentage than industrial customers.
 - The MEEI also suggested that residential and commercial customers (small and medium scale businesses) should be compensated at a higher percentage than industrial customers for breaches under GES5.

Compensatory Payments Claim and Exemptions/Exclusions Procedures

No comments were received pertaining to the Compensatory Payments Claim and Exemptions/Exclusions Procedures.

RIC's Decision and Rationale **The RIC is of the view that the level of compensatory payments should continue to be set at a quantum to incentivize the service provider to improve the level of its service. The intention is not to fully compensate for the cost of the inconvenience suffered for a particular consumer as this can vary greatly due to a number of factors as in the case of the propositions put forward by both the CAD and the MEEI. The RIC's proposal bore some relation to the customer's bill while not being overly punitive for T&TEC. The RIC stands by its intention to set the penalty fee at \$60.00 for residential customers for GES1, GES2, GES4, GES5, GES6, GES7 and GES8 as it represents approximately 21% of the average bi-monthly bill. The penalty fee will be set at \$60.00 for non-residential customers for GES2, GES4, GES6 and GES8 and \$600.00 for GES1, GES5, and GES7 as it represents approximately 2% to 20% of the average monthly bill per class of non-residential customers respectively. The penalty fee for GES3 will remain as the refund of the reconnection fee for both residential and non-residential customers.**

TABLE 1 –FINAL DECISION - GUARANTEED ELECTRICITY STANDARDS

Code	Service Description	Performance Level	Penalty Payments
GES1	Restoration of supply after unplanned outage on the distribution system.	Within 10 hours.	\$60 residential \$600 non-residential For each further 12-hour period – \$60 residential \$600 non-residential
GES2	Billing punctuality. Time for first bill to be dispatched after service connection.	Within 60 days residential. Within 30 days non-residential.	\$60 for both residential and non-residential
GES3	Reconnection of service after settling of overdue amounts or agreement on a payment schedule.	Within 24 hours.	Refund of the reconnection fee for both residential and non-residential
GES4	Making and keeping appointments.	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 notify the customer accordingly.	Within 15 working days of receiving the customer’s voltage complaint.	\$60 residential \$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

Code	Service Description	Performance Level	Penalty Payments
GES6	Responding to billing and payment queries.	Substantive reply within 15 working days.	\$60 for both residential and non-residential
GES7	Execution of capital works and new connection of supply. A. Within 30 metres. (Where no construction works on the part of the service provider are required.) 1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non-residential
	A. Within 30 metres. 2. Service drop and meter to be installed.	Within 3 working days.*	\$60 residential \$600 non-residential
	B. Within 100 metres. (Where construction works on the part of the service provider are required.) 1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non-residential
	B. Within 100 metres. 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
	B. Within 100 metres. 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
	B. Within 100 metres. 4. Meter to be installed.	Within 3 working days after the completion of construction works and the submission of all payments and documentation.*	\$60 residential \$600 non-residential
	C. Greater than 100 metres. (Where construction works on the part of the service provider are required.) 1. Completion of preliminary survey.	Within 3 working days of request.	\$60 residential \$600 non-residential
	C. Greater than 100 metres. 2. Provision of estimate.	Within 7 working days of the completed survey and all documents being provided by the customer.	\$60 residential \$600 non-residential

Code	Service Description	Performance Level	Penalty Payments
GES7	C. Greater than 100 metres. 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
	C. Greater than 100 metres. 4. Meter to be installed.	Within 3 working days after the completion of construction works and the submission of all payments and documentation.*	\$60 residential \$600 non-residential
	D. Industrial 1. Completion of preliminary survey.	Within the time frame mutually agreed to by the customer up to a maximum of 15 working days of the request.	\$600
	D. Industrial 2. Provision of estimate.	Within 15 working days of the completed survey and all documents being provided by the customer.	\$600
	D. Industrial 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
	D. Industrial 4. Meter to be installed.	Within 5 working days after the completion of construction works and the submission of all payments and documentation.*	\$600
GES8	Payments owed under guaranteed standards.	Within 30 working days for non-residential and 60 working days for residential.	\$60 for both residential and non-residential

*** The requirements under GES7 A.2; B.4; C.4; and D.4 can also apply from a date mutually agreed upon between the service provider and the customer that is beyond the stipulated number of working days.**

3. THE OVERALL STANDARDS SCHEME

The RIC reviewed the comments submitted with respect to the proposed overall standards scheme. This section discusses the issues raised by the respondents with respect to the overall standards.

The RIC proposed that two of the current Overall Electricity Standards (OES), **OES1-Frequency of Meter Reading** and **OES2 - Billing Punctuality. Mailing of bills after Meter Reading**, be removed due to the benefits of the Automatic Metering Infrastructure (AMI) that has been installed in over ninety percent of T&TEC's network and also due to the fact that a very high level of performance has been achieved for both standards over the duration of the QSS Scheme. T&TEC and the MEEI were in agreement with the proposal. Although, the CAD was in agreement with the removal of OES1, it was not in agreement with the removal of OES2. The rationale given was that the automatic generation of bills does not automatically mean that there will be an automatic delivery of bills.

The RIC reiterates that there has been a very high level of performance achieved over many years for the current OES2 which is an indicator that T&TEC possesses the ability to consistently dispatch bills. Furthermore, the monitoring of **GES2 - Billing Punctuality** "the time for first bill to be dispatched after a service connection" by the RIC will ensure that the T&TEC gives due regard to this key aspect of the delivery of bills. The RIC, therefore, stands by its decision to remove the current standards for the "Frequency of Meter Reading" and "Billing Punctuality. Mailing of bills after Meter Reading".

The RIC's final decision and rationale where necessary for each of the Overall Standard along with the comments received from stakeholders are hereby presented. The Overall Standards put forward for publication in the Trinidad and Tobago Gazette are listed in **table 2**.

3.1 OVERALL ELECTRICITY STANDARDS

EXPLANATIONS AND DEFINITIONS

OES1 Network Reliability

Proposed Definition/ Performance Measure The service provider is required to maintain the yearly network reliability metrics for unplanned outages (excluding force majeure events) for each of its Distribution Areas to within limits set by the RIC. In the first year that the revised standards are in effect, the target for SAIDI will be less than or equal to 400 minutes and the target for SAIFI will be less than or equal to 4.8.

- Comments** ■ T&TEC indicated that it had no objection with the proposed OES1. The System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) are already reported in the Performance Indicator Report, therefore it would now become necessary that this aspect should be removed from the Performance Indicator Report once OES1 is finalized.
- The CAD indicated that the set performance measures seem a bit high when compared to other jurisdictions. If currently possible under the utility's infrastructure the SAIDI should be set at 350 and the SAIFI could remain at 4.8. In the future, further improvements in the utility's ability to achieve even higher standards should be encouraged.
 - The MEEI indicated that the reliability metrics for T&TEC in 2015 resulted in a CAIDI value of 70, which is below the proposed values set by the RIC. This means that T&TEC has no set target for overall improvement. However, it is important to be aware that these reliability metrics are for each of the five distribution areas. OES1 proposes that marginal values be calculated by Distribution Area. If marginal values are set, these should not be higher than the worst performing distribution. Therefore, it is important that this information be shared.

RIC's Decision and Rationale **The RIC recognizes the fact that the initial targets set for SAIDI and SAIFI are values that are higher than some of the historical values attained on an overall basis by T&TEC. However, we are guided by the fact that the historical values have represented the overall performance of the utility and that some Distribution Areas have exceeded the proposed performance target while some have lagged behind. Targets have been set for the individual Distribution Areas in order that they will be accountable for the network reliability experienced by their customers. It is anticipated that the overall reliability for the entire distribution will correspondingly improve. The targets will be reviewed annually to ensure that there is improvement in the network reliability for all customers. The implementation of the standard at this time would not replace T&TEC's reporting requirement on the overall network reliability under the current performance indicators. The proposed standard is therefore not adjusted.**

Final Definition/ Performance Measure **The service provider is required to maintain the yearly network reliability metrics for planned and unplanned outages on the distribution network (excluding force majeure events) of each of its Distribution Areas to within limits set by the RIC. In the first year that the proposed standards are in effect, the target for SAIDI will be less than or equal to 400 minutes and the target for SAIFI will be less than or equal to 4.8 for each Distribution Area.**

OES2 Responding to Meter Problems

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure **The service provider is required to respond to customers' meter problems by visiting or providing a substantive response within 10 working days 95% of the times.**

OES3 Prior Notice of Planned Interruptions

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure In the case of a planned interruption, the service provider is required to give 3 days advance notice of the interruption 100% of the time. The notice must specify the expected date, time and duration of the interruption. However, the service provider must endeavour to restore the supply as soon as possible.

OES4 Street Light Maintenance

No comments were received concerning the performance measure of the standard. The proposed standard is therefore not adjusted.

Final Definition/ Performance Measure The service provider is required to repair 100% of failed street lights under its control with the exception of highway lighting within 7 working days after receiving notification. The service provider is required to establish a weekly schedule to monitor highway lighting and shall repair 100% of failed highway lighting within 14 working days after surveyed or reported failure.

OES5 Response to Customer's Written Complaints/Requests

Proposed Definition/ Performance Measure The service provider is required to respond after receipt of written queries/ requests within 5 working days. The service provider is required to complete an investigation of the issue, resolve the matter and communicate its final position to the customer within 10 working days thereafter. In the event that a third party is involved, for example, an insurance claim, the service provider is required to complete an investigation of the issue, resolve the matter and communicate its final position to the customer within 15 working days thereafter.

- Comments** ■ T&TEC is of the view that 10 days is too short a period of time for proper investigations and resolution of matters. The original stipulated time of 30 days should not change.
- The CAD is of the view that this was a necessary adjustment to the standard.
 - The MEEI indicated that there appears to be a discrepancy between the performance levels of the new OES5 and OES6. OES5 indicates that T&TEC must respond to written queries/requests within 5 working days, whereas OES6 indicates that customers must be notified of receipt of claims within 10 working days. If the receipt of a claim and issuing notice to customers of its receipt involves the same amount of work as responding to a written query, it is recommended that these timeframes be more comparable. The MEEI also indicated that the expansion of OES5 to include more detail is an improvement on the previous iteration of the standard, the former OES6. The stipulated performance levels appear to be reasonable from a customer’s standpoint while not being onerous to T&TEC.

RIC’s Decision and Rationale **The RIC had intended that the overall time stipulated for each stage of T&TEC’s action to be cumulatively based on the time indicated for the preceding stage. Upon further examination it was apparent that the original phrasing was subject to interpretation. The final definition and performance measures have thus been reworded to clearly indicate the performance measures to be met.**

Final Definition/ Performance Measure The service provider is required to respond after receipt of written complaints/ requests within 5 working days. The service provider is required to complete an investigation of the issue, resolve the matter and communicate its final position to the customer within 15 working days following receipt of the written complaints/ requests. In the event that a third party is involved, for example, an insurance claim, the service provider is required to complete an investigation of the issue, resolve the matter and communicate its final position to the customer within 30 working days following receipt of the written complaints/ requests.

OES6	Notifying customer of receipt of claim under Guaranteed Standard GES1
Proposed Definition/ Performance Measure	The service provider is required to notify 100% of customers of receipt of claim submitted for compensatory payment within 10 working days.
Comments ■	The MEEI’s comment pertaining to the discrepancy between the performance levels of the proposed OES5 and OES6 obtains.
RIC’s Decision	The RIC has noted the discrepancy as indicated by the MEEI, whereas under OES5, T&TEC is required to respond to written queries/ requests within 5 days while the requirement to respond to the receipt of a claim under the Guaranteed Standard GES1 is within 10 days. The RIC will harmonise the performance measures of OES5 and OES6 to 5 working days. Additionally, it is anticipated that automatic compensation for breaches under GES1 will commence when all the necessary systems are instituted by T&TEC in the near future, thus ensuring that automatic compensation will be effected for all breaches of the Guaranteed Standards. However, customers should still be afforded the facility to make claims whenever they observe that compensation has not taken place as anticipated. Accordingly, the title of the standard will be changed to “Acknowledgement of receipt of claim under the Guaranteed Standards”.
Final Definition/ Performance Measure	Acknowledgement of receipt of claim under the Guaranteed Standards. The service provider is required to notify 100% of customers of receipt of claim submitted for compensatory payment within 5 working days.

TABLE 2 –FINAL DECISION - OVERALL ELECTRICITY STANDARDS

Code	Service Description	Performance Level
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 provide a substantive response to the customer within 10 working days 95% of the time.
OES3	Prior Notice of Planned Interruptions	Provide at least 3 days advance notice of planned outages 100% of the time.
OES4	Street Light Maintenance	Repair 100% of failed street lights with the exception of highway lighting within 7 working days. Repair 100% of failed highway lighting within 14 working days.
OES5	Response to Customer's Complaints/Requests (Written)	Respond after receipt of written complaints / requests within 5 working days. Complete investigation, resolve issue and communicate final position within 15 working days following receipt of the written complaints / requests. Complete investigation, resolve issue and communicate final position, if third party is involved (e.g. Insurance claim) within 30 working days following receipt of the written complaints/ requests.
OES6	Acknowledgement of receipt of claim under the Guaranteed Standards	Notify 100% of customers of receipt of a claim submitted for compensatory payment within 5 working days.

4. OTHER ISSUES

The RIC invited general comments on the QSS as part of the consultation process, these comments along with the RIC's responses are presented below.

The MEEI expressed concern that the revision of the Quality of Service Standards (QSS) for the Electricity Transmission and Distribution Sector has not been regular. It noted that the QSS were first established in 2004, followed by a review in 2008 and the second review is now occurring in 2017. It suggested that the review of the QSS should occur within a specific, regular interval, for example every five (5) years. **The RIC will conduct future full or partial reviews of the QSS for the Electricity Transmission and Distribution Sector within a shorter time frame as dictated by significant developments within the Electricity Transmission and Distribution Sector.**

The MEEI indicated that in the next revision of the QSS, the network reliability metrics for sections of 12kV, 6.6kV feeders within each distribution area should be monitored to ensure that the reliability metric continuously improves in recurring problem areas in Trinidad and Tobago. The CAD expressed concern with respect to the frequency of unplanned outages particularly when compared to other jurisdictions. It noted that unplanned outages cause inconveniences to consumers to various degrees and according to the time of the day or night can even become a security risk. Additionally, in some circumstances outages may even result in a loss or damage to electronic equipment in this digital era where consumers are utilizing a high volume of electronic items. Many breaches under GES1 would lead to high sums of compensation payments to be made which could have otherwise been used to increase technological innovation by the regulator. **The RIC will endeavour to have T&TEC work on continuously improving the reliability of supply based on the analysis of the data submitted for GES1 and OES1.**

Stakeholders were invited to comment on the measures proposed to improve the accuracy and consistency of data submissions by the service provider. T&TEC, the CAD and the MEEI were in agreement with the proposals. The MEEI also indicated that the RIC will have to determine what data is deemed necessary, and with what frequency and in what form this data should be provided by T&TEC. **The RIC views this as general agreement with its proposals and**

includes data collection templates in Appendix I for GES5 and GES7, which have been substantially amended, along with the data collection templates for the new OES1.

Stakeholders were invited to comment on the measures proposed to increase the public's awareness of the QSS scheme. T&TEC, the CAD and the MEEI were in agreement with the proposals. The MEEI also indicated that provisions should be made for the evaluation and adjustment of these measures to ensure that they are effective in disseminating information on the standards based on the response from the public. **The RIC will actively monitor and evaluate the effectiveness of the dissemination of information on the standards.**

The CAD indicated that given the increasing use of renewable energy by other jurisdictions in light of climate change and the thrust by the MEEI to encourage the use of solar powered energy specifically, has the RIC considered these changes to the source of power in the creation of the current standards? **The RIC is of the view that the attributes of service quality that are currently covered by the QSS adequately address the concerns of consumers regardless of the source of the power that is transmitted and distributed by T&TEC. The standards that will apply to the integration of renewable energy sources will be governed by the legislation that is currently being established nationally.**

The CAD questioned whether the RIC is of the view that there should be specific standards which would incentivize the service provider to adopt technologies, tools, research, etc, that would create a more efficient and reliable network? **The RIC will endeavour to have T&TEC work on continuously improving the reliability of supply based on the analysis of the data submitted for GES1 and OES1. T&TEC will be incentivized to adopt technologies, tools, and research through other measures instituted by the RIC.**

The CAD questioned whether the RIC should actively encourage the use of renewable energy in public spaces where the overhead lights are on at times 24/7 to reduce the inefficient use of the nation's limited natural gas? **The RIC is of the view that this concern is beyond the scope of the QSS.**

Professor Chandrabhan Sharma indicated that T&TEC's reason for the inability to automatically compensate for non-compliance with GES1 was that there was no GIS mapping. He stated that even if that were true, GIS mapping is not needed to obtain data on the utility's response to restoration time etc. With the existing AMI infrastructure, the utility has the capability to tell outages down to a single domestic customer. He further stated that it is possible that T&TEC is not disaggregating right now but the capability is inbuilt in the data. GIS will tell you the location but the GES has nothing to do with location but on time out. This is within their capability without a GIS. **The RIC has conferred extensively with T&TEC on this matter and is of the view that the GIS mapping of customers' connections is a requisite element to be integrated with the AMI software in order that individual customers affected by outages will be identified by a fully functional Outage Management System (OMS). T&TEC will be encouraged to implement the OMS as soon as possible.**

APPENDIX I

NEW GUARANTEED AND OVERALL STANDARDS REPORTING TEMPLATES

GES5 – Investigation of Voltage Complaints (compensation level \$60 for residential and \$600 for non-residential)

GES5	Measure	Descriptor	Value
	• Number of complaints of suspected Single-Phase Voltage Supply problems	Number	
	• Number of complaints where visit necessary	Number	
	• Number of complaints where visit not necessary	Number	
	• Number of exemptions invoked	Number	
	• Number of visits not made within 24 hours	Number	
	• Number of complaints needed correction	Number	
	• Number of complaints not corrected within 15 working days	Number	
	• Number of payments made in respect of valid claims: - where visit was necessary - where correction was necessary	Number Number	
	• Number of complaints of suspected Three-Phase Voltage Supply problems	Number	
	• Number of complaints where visit necessary	Number	
	• Number of complaints where visit not necessary	Number	
	• Number of exemptions invoked	Number	
	• Number of visits not made within 24 hours	Number	
	• Number of complaints needed correction	Number	
	• Number of complaints not corrected within the date mutually agreed upon between the service provider and the customer	Number	
	• Number of payments made in respect of valid claims: - where visit was necessary - where correction was necessary	Number Number	
	• Total value of payments made under GES5	\$	

Source:

Officer Name:

GES7 – Execution of Capital Works and New Connection of Supply (compensation level \$60 for residential and \$600 for non-residential)

GES7	Measure	Descriptor	Value
	• Number of connections requests (Within 30 metres)	Number	
	• Number of new connections made	Number	
	• Number of exemptions invoked	Number	
	• Number of preliminary surveys not made within 3 working days		
	• Number of new connections not made within 3 working days of completed survey or agreed date	Number	
	• Number of payments made in respect of valid claims	Number	
	• Number of connections requests (Within 100 metres)	Number	
	• Number of new connections made	Number	
	• Number of exemptions invoked	Number	
	• No. of preliminary surveys not made within 3 working days	Number	
	• Number of estimates not completed within 5 working days of completed surveys and all documents being provided by the customer	Number	
	• Number of construction jobs not completed within 15 working days of the provision of the estimates and the submission of any required payments and agreements signed by the customer	Number	
	• Number of new connections not made within 3 working days of completion of construction works and submission of all payments and documentation or agreed date	Number	
	• Number of payments made in respect of valid claims	Number	
	• Number of connections requests(Greater than 100 metres)	Number	
	• Number of new connections made	Number	
	• Number of exemptions invoked	Number	
	• Number of preliminary surveys not made within 3 working days	Number	
	• Number of estimates not completed within 7 working days of completed surveys and all documents being provided by the customer	Number	
	• Number of construction jobs not completed within the time frame mutually agreed to by the customer up to a maximum of 30 working days of the provision of the estimates and the submission of any required payments and agreements signed by the customer	Number	
	• Number of new connections not made within 3 working days of completion of construction works and submission of all payments and documentation or agreed date	Number	
	• Number of payments made in respect of valid claims	Number	

GES7	Measure	Descriptor	Value
	<ul style="list-style-type: none"> • Number of connections requests (Industrial) 	Number	
	<ul style="list-style-type: none"> • Number of new connections made 	Number	
	<ul style="list-style-type: none"> • Number of exemptions invoked 	Number	
	<ul style="list-style-type: none"> • Number of preliminary surveys not made within the time frame mutually agreed to by the customer up to a maximum of 15 working days of the request. 	Number	
	<ul style="list-style-type: none"> • Number of estimates not completed within 15 working days of completed surveys and all documents being provided by the customer 	Number	
	<ul style="list-style-type: none"> • Number of construction jobs not completed within the time frame mutually agreed to by the customer of the provision of the estimates and the submission of any required payments and agreements signed by the customer 	Number	
	<ul style="list-style-type: none"> • Number of new connections not made within 5 working days of completion of construction works and submission of all payments and documentation or agreed date 	Number	
	<ul style="list-style-type: none"> • Number of payments made in respect of valid claims 	Number	
	<ul style="list-style-type: none"> • Total value of payments made under GES5 	\$	

Source:

Officer Name:

OES1 – Network Reliability (For each Distribution Area)

Measure	Descriptor	Value
<ul style="list-style-type: none"> • System Average Interruption Duration Index (SAIDI) <li style="padding-left: 20px;">Distribution Area <li style="padding-left: 20px;">Exclusions <li style="padding-left: 20px;">Distribution network – planned <li style="padding-left: 20px;">Distribution network – unplanned 	<ul style="list-style-type: none"> Minutes Minutes Minutes Minutes 	
<ul style="list-style-type: none"> • System Average Interruption Frequency Index (SAIFI) <li style="padding-left: 20px;">Distribution Area <li style="padding-left: 20px;">Exclusions <li style="padding-left: 20px;">Distribution network – planned <li style="padding-left: 20px;">Distribution network – unplanned 	<ul style="list-style-type: none"> Number Number Number Number 	
<ul style="list-style-type: none"> • Customer Average Interruption Duration Index (CAIDI) <li style="padding-left: 20px;">Distribution Area <li style="padding-left: 20px;">Exclusions <li style="padding-left: 20px;">Distribution network – planned <li style="padding-left: 20px;">Distribution network – unplanned 	<ul style="list-style-type: none"> Minutes Minutes Minutes Minutes 	

Source:

Officer Name:

APPENDIX II

SUMMARY OF WRITTEN RESPONSES TO CONSULTATIVE DOCUMENT “REVIEW OF THE QUALITY OF SERVICE STANDARDS FOR THE ELECTRICITY TRANSMISSION AND DISTRIBUTION SECTOR”

Q1. What are your views with respect to the RIC’s approach to continue with the implementation of a system of Guaranteed and Overall Standards?

T&TEC:

- T&TEC is in agreement that the system of Guaranteed and Overall Standards should be continued as it serves to ensure that the quality of service provided to customers is of a high standard.

CAD:

- The CAD is in agreement that this is the best approach.

MEEI:

- It is beneficial to the Clients and the Service Provider that systems of accountability remain in place. The revision of the system of Guaranteed and Overall Standards has demonstrated standardization through continuous improvement. OES1 and OES2 were removed because of the implementation of AMI and the GES5 was an improvement to provide assurance to the client to investigate three-phase voltage imbalance. However, the only concern is that the revision of the quality of service standards (QSS) for the electricity transmission and distribution sector has not been regular. The QSS were first established in 2004. Since then, there was one review in 2008, with the second review only now taking place in 2017. It is suggested that the review of the QSS should occur within a specific, regular interval, for example every five (5) years.

Q2. What are your concerns with respect to the service provider’s performance? Please explain why?

T&TEC: N/A.

CAD:

- The CAD is concerned with respect to the frequency of unplanned outages particularly when compared to other jurisdictions. Unplanned outages cause inconveniences to consumers to various degrees and according to the time of the day or night can even become a security risk. Additionally, in some circumstances they may even result in a loss or damage to electronic equipment in this digital era where consumers are utilizing a high volume of electronic items. They also eventually lead to high sums of compensation

payments to be made under GES1 which could have otherwise been used to increase technological innovation by the regulator.

MEEI:

- The RIC has proposed to use the performance reliability metrics SAIDI, SAIFI and CAIDI as defined by the IEEE. This is an excellent improvement to the document. The values for reliability metrics trended downwards between 2011 and 2015 indicating an improvement of the performance of the Service Provider. Data is missing for 2016. However, there should be a decrease in the value of the reliability metric for 2016 if the same trend is expected. However, during the years 2005 and 2007 there were large increases in the values of the reliability metrics. *(The MEEI indicated discrepancies between the values for CAIDI for 2004 and 2008 as presented in the Table 9, page 27 of the consultative document with values calculated by the MEEI).*

The new OES1 standard has set the marginal values for SAIDI as 400 and SAIFI as 4.8, which gives a value for CAIDI of 83.3. These are similar to the benchmark values for Poland. The reliability metrics for T&TEC in 2015 give a CAIDI value of 70, which is below the proposed values set by the RIC. This means that T&TEC has no set target for overall improvement. However, it is important to be aware of these reliability metrics for each of the five distribution areas. OES1 proposes that marginal values be calculated by Distribution Area. If marginal values are set, these should not be higher than the worst performing distribution. Therefore, it is important that this information be shared.

The next revision of the document (possibly five (5) years from now) should narrow focus to sections of 12kv, 6.6KV feeders within each distribution area, to ensure that the reliability metric continuously improves in recurring problem areas in Trinidad and Tobago.

Q3. What are your views on the retention of GES1, GES2, GES3, GES4, GES6 and GES8? Would the performance measurements of these standards have to be adjusted, and if so, how?

T&TEC:

- T&TEC does not have any objection to the retention of GES 1, 2, 3, 4, 6 and 8.

CAD:

- The CAD is in agreement that they should be maintained and are not currently in need of adjustment.

MEEI:

- It is suggested that the service description for GES1 should be modified to exclude force majeure outages, as done for OES1. In the event of an outage that may occur during a natural disaster or terrorist attack, for example, it may take days to restore supply.

T&TEC should not be held responsible for delays in restoration of supply due to events of this nature.

If the non-residential category is intended to include commercial and industrial customers, then in the case of a normal unplanned outage, these customers may suffer a financial loss much greater than the levels of compensation outlined in this Guaranteed Standard. Furthermore, it is recommended that the manner in which the GES1 will treat with clients whose businesses are at their homes should be clarified.

It is suggested that commercial and industrial customers should be compensated according to:

1. The percentage of hours of service at justified rates. Commercial customers (small and medium scale businesses only) should be reimbursed at a higher percentage than industrial customers.
2. The percentage of contracted production loss and loss of perishables. Commercial customers (small and medium scale businesses only) should be reimbursed at a higher percentage than industrial customers.

Q4. The range of issues under GES5 which pertains to voltage complaints has been expanded to include imbalanced three phase voltages. What are your views with regard to the adjustment made to this standard?

T&TEC:

- T&TEC disagrees with the proposed changes as it relates to the voltage irregularities and the variation between phases greater than $\pm 2\%$ and suggest that there be further discussion on the matter.

CAD:

- The adjustment made to this standard was necessary as it satisfies the reasonable expectation of all types of consumers for consistent voltage supply including commercial consumers who would be more dependent on the three phase voltage. The importance of this standard is also highlighted given the safety concerns involved if there is noncompliance.

MEEI:

- This is an excellent improvement. The Utilizations Department within each Distribution Area of T&TEC has the responsibility of handling damaged appliance claims. The GES5 standard was entitled Investigation of voltage complaints (high/low voltage and imbalanced three phase voltage)". For the sake of clarity, it should be specified whether the RIC will continue to lobby on behalf of the client for damaged equipment claims or if only the GES5 set time margins for compliance for response and resolution will be utilized.

It is suggested that the clients be categorized similar to the rate categories of residential, commercial and industrial. Residential and commercial customers (small and medium scale businesses) should be compensated at a higher percentage than industrial customers. An industrial customer should have protective circuitry installed for expensive equipment for over voltage and overloading. Therefore, these equipment are less likely to suffer damages.

Q5. A number of additional performance measures have been introduced under GES7 based on the concerns expressed by customers. What are your views with regard to the adjustment made to this standard?

T&TEC:

T&TEC recommends changes to the number of working hours as follows:

C3 – 30 working days instead of 20 working days

D1 – 15 working days instead of 3 working days

D4 – 5 working days instead of 3 working days

CAD:

- The adjustments to this standard became necessary given the complaints of consumers and is therefore reasonable in meeting the goal of the standard.

MEEI:

- This is an excellent improvement. It is recommended that RIC consult with T&TEC to establish a baseline for duration of similar projects, work breakdown structure and scheduling if this has not already been done.

Q6. The minimum compensatory payment level has been set at \$60.00. Under GES1, GES5 and GES7 the compensatory payment level for residential customers has been set at \$60.00 and for non-residential customers it has been set at \$600.00 based on the anticipated effect that non-compliance with these standard will impose on the respective categories of customers. Do you agree that it is appropriate to set differing payment levels for the different categories of customers? What method should be used to determine payment levels going forward and how frequently should this review occur?

T&TEC:

- T&TEC has a very high compliance rate for the Guaranteed Standards, therefore it is unclear as to why the RIC saw it necessary to propose the penalty fee increase from \$50.00 to \$60.00 for Residential customers for all the Guaranteed Standards. No objection is raised for setting different payment levels for the different categories of

customers. Reviews on payment going forward can be done whenever the standards are being revised.

CAD:

- The CAD is in agreement that different payment levels should be set for different categories of customers as they would experience different levels of losses. The percentage of the bill method currently used is reasonable. Another method that could be used is a percentage of the usual loss incurred to the consumer during the various scenarios. This review should take place every five years at maximum.

MEEI:

- Q6 was answered in Q3, Q4 and Q5.

Q7. OES1 and OES2 are being removed due to the benefits of the Automatic Metering Infrastructure (AMI) that has been installed in over ninety percent of T&TEC's network and the very high level of performance achieved over time. Are you in agreement with this proposition?

T&TEC:

- Yes.

CAD:

- The CAD is in agreement with the removal of OES1 however it is not in agreement with the removal of OES2. An automatic generation of bills does not automatically mean that there will be an automatic delivery of bills.

MEEI:

- The discontinuation of these standards is acceptable, especially given that T&TEC has recently indicated that AMI has been installed in over 99% of its network.

Q8. A new standard pertaining to T&TEC's network reliability performance has been proposed under OES1. What are your views on the establishment of this new standard and the proposed performance measures and requirements??

T&TEC:

- T&TEC has no objection with the proposed OES1. The System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) is already reported in the Performance Indicator Report, therefore it would now become necessary that this aspect should be removed from the Performance Indicator Report once OES1 is finalized.

CAD:

- The establishment of this new standard became necessary given the regulator's previous performance in this area and its potential impact on consumers. However, the performance measures seem a bit high when compared to other jurisdictions. If currently possible under the "regulator's" infrastructure the SAIDI should be set at 350 and the SAIFI could remain at 4.8. In the future, further improvements in the regulator's ability to achieve even higher standards should be encouraged.

***The word "regulator" should be replaced with the term "service provider"**

MEEI:

- The new OES1 is a necessary and welcomed addition to ensure that customers in all distribution areas receive the same quality of service. Overall performance figures alone mask the inequalities in reliability in different distribution areas. By this same token, it is proposed that Tobago be split into two or more smaller distribution areas for the purposes of performance measurement. This additional measure would help to ensure that reliability of supply is uniform across Tobago. The idea is not to create new distributions, which will increase operating cost to T&TEC, but to conceptualize faux distributions (by area or 12kV feeder) for performance measurement and to ensure continuous improvement of the system reliability in problem areas.

Q9. What are your views on the retention of the new OES2, OES3, OES4, and OES6? Would the performance measurements of these standards have to be adjusted, and if so, how?

T&TEC:

- T&TEC does not have any objection to the retention of OES2, 3, 4 and 6. The performance measurements should not be adjusted.

CAD:

- The CAD is of the view that all these standards and their performance measurements should be maintained.

MEEI:

- The retention of the OES3, OES4, OES5 and OES7 is acceptable. Those standards are still relevant and necessary. However, there appears to be a discrepancy between the performance levels indicated in the new OES5 and OES6.

OES5 indicates that T&TEC must respond to written queries/requests within 5 working days, whereas OES6 indicates that customers must be notified of receipt of claims within 10 working days. If the receipt of a claim and issuing notice to customers of its receipt involves the same amount of work as responding to a written query, it is recommended that these timeframes be more comparable.

Q10. The range of issues under the new OES5 which pertains to the response to customer queries has been expanded to include investigating and resolving the query. What are your views with regard to the adjustment made to this standard?

T&TEC:

- T&TEC is of the view that 10 days is too short a period of time for proper investigations and resolution of matters. The original stipulated time of 30 days should not change.

CAD:

- The CAD is of the view that this was a necessary adjustment to the standard.

MEEI:

- The expansion of OES5 to include more detail is an improvement on the previous iteration of the standard, the former OES6. The stipulated performance levels appear to be reasonable from a customer's standpoint while not being onerous to T&TEC.

Q11. Measures have been proposed to improve the accuracy and consistency of data submissions by the service provider. Are you in agreement with these propositions? If you do not agree, please explain why?

T&TEC:

- T&TEC is in agreement with the proposed measures.

CAD:

- The CAD is in agreement with these propositions. Additionally, as a consumer body which has been collating and reporting on complaints information for decades, the CAD is available for any information sharing on how these proposals can be best implemented.

MEEI:

- While the measures being proposed appear to be reasonable, it is up to the RIC to determine what data is deemed necessary, and with what frequency and in what form this data should be provided by T&TEC.

Q12. Measures have been proposed to increase the public's awareness of the QSS scheme. Are you in agreement with these propositions? If you do not agree, please explain why?

T&TEC:

- T&TEC is in agreement.

CAD:

- The CAD is in agreement with these propositions. A suggestion by the CAD is to also provide this information on a social media platform so that it is easily shared or disseminated at a low cost as this has been an effective tool used by the CAD.

MEEI:

- The proposed measures appear to be adequate. However, provisions should be made for the evaluation and adjustment of these measures to ensure that they are effective in disseminating information on the standards based on the response from the public.

GENERAL COMMENTS

CAD:

Category of Comment	Comment <i>(justification for change)</i>
Technological Innovation	<ol style="list-style-type: none">1. Given the increasing use of renewable energy by other jurisdictions in light of climate change and the thrust by the Ministry of Energy and Energy Industries to encourage the use of solar powered energy specifically has the regulator considered these changes to power source in the creation of the current standards?2. Is the regulator of the view that it should have specific standards which would incentivize the “regulator”* to adopt technologies, tools, research, etc, that would create a more efficient and reliable network?3. Should the regulator actively encourage the use of renewable energy in public spaces where the overhead lights are on at times 24/7 to reduce the inefficient use of the nation’s limited natural gas?

- **The word “regulator” should be replaced with the term “service provider”**

Professor Chandrabhan Sharma

- I have reviewed the Consultative document and am in agreement with the proposals. The only issue I have is the statement in 5.13. Here it is stated that the Utility's excuse for non-compliance with GES1 was that there was no GIS mapping. Even if that were true, GIS mapping is not needed to obtain data on the utility's response to restoration time etc. With the existing AMI infrastructure, the utility has the capability to tell outages down to a single domestic customer. It is possible that they are not disaggregating right now but the capability is inbuilt in the data. GIS will tell you the location but the GES has nothing to do with location but on time out. This is within their capability without a GIS.