

# Information Requirements: Business Plan 2018 – 2023 Trinidad & Tobago Electricity Commission

September

2017

This document is one of a series of discussion papers exploring a specific aspect as part of the second price control review for the electricity transmission and distribution sector, when the RIC will set charges for the period 2018-2023

Information Document

## TABLE OF CONTENTS

	Page No.
EXF	CCUTIVE SUMMARY 1
INT	RODUCTION 2
1.1	Background
1.2	Role of the Business Plan
PRO	OCESS FOR DEVELOPING AND ASSESSING THE
	INESS PLAN
COI	NTENTS OF THE BUSINESS PLAN
3.1	Overview
3.2	The Main Submission
	3.2.1 Service Provider and the Operating Environment – A Summary 6
	3.2.2 Maintaining Service to Customers
	3.2.3 Specific Information Requirements
	3.2.3.1 Demand Forecast 8
	3.2.3.2 Revenue Requirement
	3.2.4 Efficiency Improvements
	3.2.3.1 Performance Indicators
	3.2.3.2 Other Information
3.3	Public Summary
MO	NITORING PLAN
4.1	Monitoring Plan
4.2	Performance Reporting and Auditing

This document is being released for information and the RIC can be contacted at the undermentioned addressed.

Executive Director
Regulated Industries Commission
Furness House – 1<sup>st</sup> & 3<sup>rd</sup> Floors
Cor. Wrightson Road and Independence Square
Port-of-Spain, Trinidad

Postal Address: P.O. Box 1001, Port-of-Spain, Trinidad

**Tel.** : 1(868) 625-5384; 627-7820; 627-0821; 627-0503

**Fax** : 1(868) 624-2027

Email : ricoffice@ric.org.tt or comments@ric.org.tt

Website : www.ric.org.tt

Copies of this document are available from the RIC Information Centre or from our website at <a href="www.ric.org.tt">www.ric.org.tt</a>.

### **EXECUTIVE SUMMARY**

A key feature of setting new price controls for a service provider is an invitation to that service provider to formulate a Business Plan or price control proposal. The purpose of this document, the **Information Requirements: Business Plan 2018-2023 Trinidad and Tobago Electricity Commission** (T&TEC), is to provide guidelines to the electricity transmission and distribution service provider, T&TEC, on the preparation of its Business Plan or price control proposal and to outline the information required to support the proposal. These guidelines have been designed to ensure that a clear and consistent framework is applied in the Regulated Industries Commission's (RIC) decision-making process.

The price control proposal will detail how T&TEC plans to invest in its network to meet the service needs of its customers and how it intends to recover the cost of providing this service through its tariffs and charges. The RIC will also shortly release the document, **Setting Price Control: Framework and Approach**, wherein the RIC sets out broadly, the approach that it will follow to arrive at a final decision on the price controls.

When T&TEC's price control proposal is submitted to the RIC, it will form the basis for the Draft Determination and requisite stakeholder consultation. The consultation that the RIC will undertake is an opportunity for consumers and other stakeholders to express their views and have input on the quality and reliability of the services they will receive and the prices they will have to pay over the forthcoming regulatory control period.

The business plan or price control proposal of T&TEC must include, among other things, information on the following:

- Demand forecasts;
- Revenue requirement:
  - Capital expenditure requirements;
  - Efficient operating and maintenance expenditure requirements;
  - Cost of capital financing; and
- Service levels.

An overview of the information that should be provided by T&TEC for each of the above areas is provided later in this document.

### 1. INTRODUCTION

### 1.1 Background

The Regulated Industries Commission (RIC) is, among other things, responsible for establishing the principles and methodologies for determining rates, monitoring the performance and efficiency of service providers and setting and enforcing standards of service. Section 48 of the RIC Act, No. 26 of 1998, requires the RIC to establish the principles and methodologies for determining rates for a maximum period of five (5) years. It is within this context that this document has been prepared.

The process of assessing and determining proposed rates over the regulatory period involves:

- The identification of service requirements, standards and obligations to be delivered;
- The establishment of forward-looking revenue requirements for efficient delivery of services; and
- Ensuring that proposed prices are sufficient to recover the revenue requirements.

An integral part of this process is the development and submission of a Business Plan by T&TEC in support of the exercise of setting price limits and other associated decisions. The Business Plan will form a basis for the RIC's assessment of the proposed revenue requirement and resulting determination of prices to be applied over the regulatory period in accordance with the requirements of the RIC Act.

### 1.2 Role of the Business Plan

The Plan should provide the justification for the service provider's submission relating to price control limits and should:

- explain in a clear and consistent way T&TEC's application for price limits, its costs and bill implications;
- set out its overall strategy and identify in sufficient details all the strategic issues T&TEC faces for the proper carrying out of its functions;

- include well-founded forecasts of costs (investments and maintenance expenditure) and revenue to ensure an adequate balance between supply and demand in the provision of service to customers;
- provide estimates of T&TEC potential to reduce costs through improved efficiency;
- establish timelines and identify outcomes to be achieved over the regulatory control period so that progress can be measured against those milestones; and
- inform all of the other relevant factors that the RIC should consider in determining fair and reasonable price limits.

The RIC's views on a number of issues related to the regulatory framework, process and the approach the RIC intends to take in assessing the service provider's submission will be put out for consultation with and comments from stakeholders. Some of the issues include:

- the form of price control;
- the length of the regulatory period;
- dealing with controllable and uncontrollable cost items;
- tariff structures, subsidies and mechanisms for assisting the lower income groups;
- miscellaneous charges and customer contributions; and
- incentive mechanisms.

The comments received in response to these issues will assist the RIC in the finalization of its Determination.

### **Structure of this Document**

The remainder of this document is structured as follows:

- Section 2 describes the process for developing and assessing the Business Plan.
- Section 3 discusses the contents of the Business Plan.
- Section 4 discusses the requirements of the Monitoring Plan.

# 2. PROCESS FOR DEVELOPING AND ASSESSING THE BUSINESS PLAN

Broadly, there are three stages in developing and assessing the proposed Business Plan:

### • Establishment of Information Requirements and Clarification:

- Consultation between the RIC and T&TEC on the content and format of the Plan.
- Finalisation of any issues and other additional information requirements.

### Preparation of draft Business Plan:

- T&TEC's consultation, if necessary, with the customers and Minister/Ministry
- Submission of the draft Business Plan to the RIC.
- RIC's assessment of, and guidance on, the draft Business Plan.

### • RIC's Assessment of the completed Business Plan:

- Submission of the final plan to the RIC.

The RIC strongly believes that there is merit in consulting on a number of key issues to facilitate T&TEC's preparation of its proposals, including:

- the information and approach that could be used by service providers to develop demand forecasts;
- a demonstration that proposed expenditure for both operating expenditure (Opex) and capital expenditure (Capex) is efficient;
- measures to pursue efficiency improvements;
- provision of appropriate return on assets; and
- tariff design and structure.

These issues are discussed in detail in the document entitled, "Framework and Approach: Second Regulatory Control Period", which is also being released for public comment.

### 3. CONTENTS OF THE BUSINESS PLAN

The Business Plan should contain three parts:

- Overview
- Main Submission (Detailed Justification)
- Public Summary

### 3.1 The Overview

The overview is a stand-alone summary of T&TEC's overall strategy for the proper execution of its functions over the regulatory control period and beyond to ensure the provision of adequate services to customers, including its service performance in recent years, impediments to performance and the state of its assets. The overview provides an opportunity for T&TEC to summarize the main points of its proposal and to draw attention to any particular issue, relevant to the price review decision-making process. In short, a vision of where it expects to be in five to ten years and how it proposes to get there. It is also expected that this overview would typically cover: a SWOT analysis; the organization's growth prospects; key performance indicators; and aspirations for the future. At a minimum, the overview should:

- set out, in summary, the key activities and programmes/projects that T&TEC proposes to undertake over the control period, and the outputs and milestones to be achieved during the period, including its assessment of the environment and the parameters within which it will have to operate, during the control period and beyond;
- set out the price limits that are being sought and how these translate into average bills for each class of customers;
- outline how T&TEC has taken into consideration the interests of customers and the overall balance between service levels, prices and priorities for improvements;
- include a series of summary tables covering the overall strategy, financial projections, asset values and expenditure, including the scope for improving efficiency and existing practices; and

• state how T&TEC proposes to finance its strategic objectives and the revenue that will be necessary to ensure financial viability.

### 3.2 The Main Submission

The main submission is a detailed justification of the strategy and various issues/options identified in the **Overview**. The submission must comprise four (4) sections:

- The Service Provider and Operating Environment A Summary;
- Maintaining and improving service to customers;
- Specific Information Requirements; and
- Efficiency Improvements.

These areas are discussed in detail hereunder.

### 3.2.1 The Service Provider and the Operating Environment – A Summary

This Summary should focus on T&TEC's:

- Assessment of the likely operating environment during the regulatory control period and beyond;
- Achievements to date with respect to services to customers;
- Planned improvements in service to be delivered;
- Strategies for the achievement of supply/demand balance;
- Maintenance of its network and assets:
- Key forecasts over the period; and
- Risks and uncertainties and how it intends to manage them.

In making policy decisions for the price limits, T&TEC must take account of the potential effects on service affordability.

### 3.2.2 Maintaining and Improving Service to Customers

T&TEC's strategy for maintaining and improving service to customers must be at the core of its submission and is the main focus under this section. The information should be provided under three (3) headings:

### (a) Maintaining Service and Serviceability to Customers

T&TEC should provide year-by-year projections of delivery of outputs over the control period that will maintain base service levels and serviceability to both current and future customers. This should take into account customer complaints information such as supply interruptions, as well as its asset management plans and strategy including its operating practices and planned routine maintenance activities. T&TEC must identify the minimum levels of activity that it considers necessary to maintain delivery of the outputs and justify projected operating and capital maintenance expenditure needed to deliver these outputs. Full costing information should be provided as required under the **Specific Information Requirements Section.** 

### (b) Service Enhancement

T&TEC must outline its plans and strategy to improve the service delivered, measurable outputs and the performance to be achieved year by year over the regulatory control period, including the projected service enhancement operating and capital expenditure needs. It must state its reasons for proposing the enhancements, for example, it should state whether existing performance is poor in comparison with its comparators. Where T&TEC is seeking specific financing in its Business plan, the impact of the proposed improvements on operating and capital expenditure, with expected impact on bills, must clearly be stated. Full costing information should be provided as required under the **Specific Information Requirements Section**.

### (c) Maintaining the Supply/Demand Balance

T&TEC must set out its plan and strategy for maintaining the balance between supply and demand, focusing on the implications for expenditure (operating and capital). The information must include the service provider's assumptions and judgment on the expenditure (operating and capital) needed to maintain the balance. T&TEC's strategy

must represent the least cost combination of measures to maintain the balance. Full costing information should be provided as required under the **Specific Information Requirements Section.** 

### 3.2.3 Specific Information Requirements

This section requires T&TEC to furnish a comprehensive set of information on expenditure and revenue forecasts, demand projections, plans to finance its operations, the consequences for customers' bills, financial projections, existing loan agreements, cost of capital, required rate of return and capital structure. These issues are discussed below.

### 3.2.3.1 Demand Forecast

Demand forecasts are a central element of the Price Control review assessments and decision-making, as they underpin expenditure requirement forecasts, forecast revenue requirement and the price control modeling and decision-making. They are of particular importance in order to propose the prices required to recover the revenue needed to deliver prescribed services over the regulatory period. Demand forecasts are also a key determinant of capital and operating expenditure – as they drive the level of new connections and the need to augment existing systems. Accurate forecasts will reduce price volatility for customers and the risk of short-term mis-match between revenues and costs. In assessing the proposed prices, the RIC will, therefore, expect that the demand forecasts are reasonable and based on sound information and assumptions.

In preparing demand forecasts, the RIC would expect T&TEC to:

- analyze historical levels of demand, identifying the relevant trends, the major factors that determine these trends and explaining any variations;
- recognize and reflect key drivers of demand and supply;
- consult with major customers (e.g. industrial/commercial) on their anticipated requirements;

- take into account private/Government's initiatives in the housing and industrial sectors;
- consider the likely impact of any changes in tariffs and other demand side management initiatives, such as, reduction in system losses;
- have regard to the country's economic conditions;
- reflect conservation and energy efficiency initiatives, and
- have regard to the adoption and the use of electric vehicles within the country.

The RIC expects that the service provider will provide a summary of demand forecasts, and the following:

- information which describes the methodological approach taken;
- the key demand forecasting issues; and
- key assumptions adopted in generating the forecasts.

Although, the RIC will not require independent verification of demand forecasts for this review, in the future T&TEC may be required to satisfy the RIC, through an independent verifier that its methods are reasonable and sound.

T&TEC must provide the following information for the control period:

- Cost of Service Study (most recent);
- Electricity consumption by Customer Type;
- Customer Numbers by Customer Type;
- Maximum daily and hourly demand;
- New Customers Connections (Net Customer Increase) by customer class and broken down as follows:
  - New customer connections;
  - Existing customer Numbers;
  - Total customer Numbers; and
  - Net Increase in customer Numbers.

### 3.2.3.2 Revenue Requirement

One of the common and effective methods for deriving forward-looking estimates of the revenue that T&TEC requires, to deliver proposed outcomes and meet service standards over the regulatory period is the "building-block" approach. Under this approach, the revenue requirement reflects efficient operating expenditure and a return on and of, the regulatory asset base (RAB), updated each year of the control period to reflect any additional capital expenditure net of contributions, asset disposals and depreciation [i.e. Efficient Opex + Depreciation + (RAB + Capex) \* Cost of Capital]. A detailed explanation of the components making up the revenue requirement is provided below:

### (a) Operating and Maintenance Expenditure

Operating and maintenance expenditure (Opex) is a key component of revenue requirement and is included in the year in which it is incurred. A key issue for the RIC is to ensure that the expenditure forecasts are efficient and reflect a long-term planning horizon.

The Business Plan should clearly outline forecasts of Opex for each year of the regulatory control period, justify forecast expenditure levels, the main drivers of expenditure and provide evidence of projected productivity improvements. It also needs to outline the relationship between expenditure and the delivery of outcomes and obligations over the period.

The information provided should include historical levels of maintenance expenditure by asset categories and subsets, the projected capital maintenance needs by categories and sub-categories.

### Justification and Key Drivers of Opex

The Business Plan should provide information and justification in support of the proposed Opex and outline the key drivers for business as usual expenditure, and expenditure related to the delivery of new obligations. The RIC would expect a detailed level of justification where T&TEC is proposing a significant departure from historical levels.

The price-control proposal of the T&TEC must include three categories of forecast operating and maintenance expenditure (Opex):

- base operating and maintenance costs this will exclude guaranteed scheme payments and cess (these are to be shown separately);
- costs associated with the impact of growth (i.e. increase in total customers); and
- changes in the composition of Opex arising from new obligations and functions.

The base Opex for the regulatory control period will be based on the existing obligations and functions of T&TEC and will be calculated by using the actual expenditure for 2016, less the cess payments and guaranteed scheme payments. T&TEC must also forecast a rate of change for each year of the regulatory control period which will be used to generate the forecast base Opex. Additionally, the Opex costs associated with any new obligations and functions are required to be forecast separately. T&TEC must also detail its capitalization policy in its proposal.

### **Productivity/Efficiency Improvements**

The RIC Act requires that the service provider's proposed prices provide for a sustainable revenue stream that does not reflect monopoly rent or inefficient expenditure and that proposed prices provide incentives to pursue efficiency improvements.

One approach to estimating efficient expenditure is to benchmark the performance against other relevant utilities/businesses. T&TEC must indicate the methods that will be used for assessing the efficiency of Opex and provide information on the indicators used for comparison, such as

total costs, operating and maintenance costs, overhead costs and other efficiency and productivity measures including comparing costs of particular and comparable tasks. Such an approach could be undertaken at "the whole of business level", or for specific components of expenditure, taking into consideration the danger of relying exclusively on benchmarks to assess expenditure forecasts.

Another approach is to review historical expenditure incurred and to then examine the continuing trend over the regulatory period, setting out any reasons for expected departures from trend expenditure.

### T&TEC must provide Opex breakdown by:

- customer group (for example, industrial, commercial, domestic);
- category (for example, labour, material, rent);
  - labour costs should be further disaggregated by:
    - wages, salaries and employee related benefits (to be shown separately);
    - o level of overtime of the total payroll costs
    - o level of sickness and absenteeism;
    - level of total leave (contracted, extended and emergency leave); and
    - pension costs (forecast for each year of the control period must be based on actuarial valuations).
- activity (for example, infrastructure maintenance, customer service);
- on-going controllable and uncontrollable costs and one-off costs or non-recurring operating costs; and
- costs relating to building or restoring a brand and sponsorships.

### (b) Capital Expenditure Requirements

Capital expenditure (Capex) is another key element of the revenue requirement. Net Capex is added to the Regulatory Asset Base (RAB) and

the service provider receives the revenue to repay its debt principal and interest charges through a **return of** the RAB (i.e. depreciation) and **return on** the RAB. In assessing the Capex forecasts, the RIC has to be satisfied that they are efficient and prudent.

T&TEC must set out its forecast capital expenditure programme for the regulatory control period and beyond, and provide supporting explanations for the proposed level, time paths of expenditure, complete with due dates for delivery of the projects and the outcomes that will be delivered. The forecasts must be internally consistent and reconcilable with other relevant proposals and supporting information presented in the price control proposal. All projects/capital expenditure to be funded by the State and/or other bodies must be shown separately.

To facilitate proper assessment of capital expenditure forecasts, Capex for new obligations and Capex related to business as usual activities must be shown separately. This will help ensure transparency to all stakeholders of the cost of new obligations and hence the impact on rates. The expenditure must be categorized according to:

- Replacement: Expenditure to replace/upgrade assets reaching the end of their functional lives. The process for the replacement or upgrade of existing assets is based on the assessment of the asset condition, its likelihood of failure, the consequences of failure, and the need for increased capacity. Capital expenditure to maintain the asset base should normally be divided into preventative/proactive capital maintenance, reactive capital maintenance, capital maintenance for health and safety and to meet any required environmental standards.
- **Growth:** Expenditure required to service population growth and new development.
- **Enhancement:** Those projects required to minimise risks and environmental impacts or improve service delivery standards. These

projects may be required for example, to mitigate risks to the assets, and provide for a lack of standby systems or improve output of underperforming assets.

• **Other** – This would include all other capital expenditure.

T&TEC will be required to demonstrate how its current and proposed expenditure patterns sit within an asset management programme and how these patterns are consistent with, or vary from, the past. Furthermore, T&TEC has to demonstrate that processes are in place to address issues relating to:

- security of supply;
- service reliability and performance;
- ensuring expenditure is prudent and is undertaken efficiently; and
- post-project evaluation.

Finally, T&TEC must provide additional information, where necessary, to assist the RIC's understanding of the above. For example, the condition and serviceability of the existing network, the life expectancy of assets, unit costs and plans to ensure that its expenditure programme is delivered over the control period. T&TEC should also provide details of major capital expenditure undertaken over the period 2011-2016 (including of source of funding), and inclusive of whether or not these projects where completed on time and within budget. T&TEC must also detail its capitalization policy.

### (c) Cost of Capital Financing

Cost of capital may be calculated by one of the following methods:

- Return on RAB plus depreciation.
- Cash needs, where cost of capital is simply the amount of debt service (i.e. interest and principal payments).
- Infrastructure renewals accounting plus a return on RAB.

The RIC Act [Section 67(4)] provides for the recovery of cost of financing existing and new investment through:

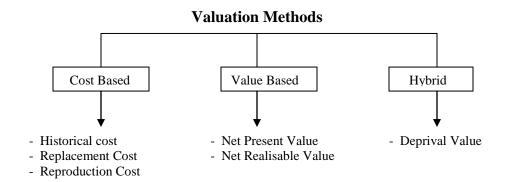
- earning a return on the value of the RAB plus
- a return of the value of the RAB (i.e. depreciation).

The T&TEC is asked to set out in its proposal:

- opening regulatory asset base;
- an estimate of its rate of return or weighted average cost of capital;
- forecast regulatory depreciation; and
- actual and forecast asset disposal.

### Regulatory Asset Base (RAB)

Accurate asset valuation is critical to generating appropriate price limits. There are a number of methods of asset valuation (shown below) which can generate different values for similar assets.



### **Information to be supplied:**

- list of Assets by class/type e.g. land/buildings, plant, pipelines, miscellaneous (vehicles, other equipment, furniture, IT).
- valuation method used for particular class/group of assets.
- total RAB.

### **Rolling forward the RAB**

T&TEC needs to show the forecast value of the RAB for each year of the regulatory control period. This is to be done in the following manner:

Opening RAB plus forecast gross capital expenditure less forecast capital
contributions less forecast proceeds from disposal of assets less depreciation
equals closing RAB.

### T&TEC should, therefore, set out:

- forecast levels of contributions and the assumptions underlying those forecasts; and
- an estimate of the proceeds from asset-disposals, and the nature and type of assets to be sold.

### **Asset Consumption (Depreciation)**

Broadly, there are two methods for dealing with asset consumption:

- (i) Depreciation this is the common accounting approach for recognizing the loss in value as assets wear out. There are a number of methods for allocating depreciation – Straight Line, Accelerated or Units of Production.
- (ii) Renewals Annuity where the network of assets is viewed as a single system, the service potential of which is maintained in perpetuity through regularly planned maintenance and renewal programmes and, therefore, does not need to be depreciated. Essential elements of this method are the Asset Management Plan and Expenditure needed to maintain the system. If T&TEC proposes this approach, the Business Plan must include supporting information.

T&TEC must also provide data relating to the utilization of assets, the weighted average remaining life of assets/asset class/groups of assets, and the weighted average depreciation rates for assets/asset class/groups of assets.

### Rate of Return on Capital

An allowed rate of return can be derived by calculating the Weighted Average Cost of Capital (WACC) (i.e. cost of debt and equity capital). Generally, the cost of equity is estimated by the Capital Asset Pricing Model (CAPM). T&TEC has the option of using an alternative method, which must be properly justified. However, this will not bind the RIC in its determination.

### Information to be supplied under this section:

- model used to determine the overall rate of return;
- capital structure (gearing level), industry benchmark;
- total debt servicing (Interest and finance charges);
- appropriate risk free rate used, market risk premium, the appropriate quantification of the equity beta, gamma etc.;
- all loans with interest rates, marginal rate, average cost of debt;
- government guarantees, if any, for each loan; and
- purpose of each loan.

### (d) Service Levels and the Service Incentive Mechanism

Economic regulation must consider quality together with price because lowering of quality is economically the equivalent of a high price. Poor quality may result under price controls such as multi-year RPI-X price/revenue caps which provide incentive to reduce expenditure.

Quality of service monitoring programmes therefore complement price regulation. There are a number of methods of providing incentives to improve service performance. These include public reporting of quality of service performance, a Service Incentive Scheme (or S-Factor Scheme) where a service provider's

allowed revenue is increased (decreased) based on its performance in relation to performance targets and a Guaranteed Payment Scheme. Under this scheme, payments are made to customers where the service received by them is below a specific threshold. The RIC has already developed a Guaranteed Service Level payments scheme (Guaranteed and Overall Standards). T&TEC will be required to provide information to demonstrate how it intends to improve its performance under the scheme.

### (e) Form of Price Control and Tariffs

In this section, T&TEC should outline the form of price control it would prefer, as well as provide a detailed discussion of the reasoning underpinning its proposal. The following are among the different forms of price controls that may be adopted:

- tariff basket
- individual price caps
- revenue cap
- revenue yield
- combination of the above.

With respect to pricing proposals, T&TEC must show that the impact on customers of the proposed tariff structures have been fully taken into account and how low income or vulnerable customers will be affected. T&TEC must consider how it intends to implement the tariffs i.e. whether a phased or rapid introduction of new tariffs. The practicalities and costs associated with administering a number of tariff structures must also be considered. In short, this section should contain the following discussion:

- background information about the service and recent pricing history;
- the reasoning behind the proposed tariff structure, including a clear identification of the principles underpinning the proposal;
- customers' responsiveness to proposed tariff structure;

- the manner in which the tariffs are to be implemented (i.e. billing period, customer class etc.); and
- the impact of the proposal on different customers, on inflation and on the country's competitiveness.

### (f) Miscellaneous Charges

The Business Plan should include information on all miscellaneous charges, inclusive of major contracting charges, and fees (regulated and unregulated) that T&TEC intends to impose and must outline:

- the proposed miscellaneous price and tariff structure;
- the justification for the charges; and
- the impact the proposed charges on customers.

### 3.2.4 Efficiency Improvements

T&TEC must detail its plans to improve both operating and capital expenditure efficiency over the regulatory control period, show how these have been incorporated into its projections and identify any assumptions made. The scope for improvements in efficiency should cover all major areas of operations. T&TEC should provide a list of areas where measures were undertaken to improve efficiency in the last three years and how they impacted on reducing costs of the organization. Additionally, T&TEC must furnish information showing its relative efficiency or inefficiency compared with other utilities in the Caribbean and elsewhere, including any efficiency studies undertaken and methodology used.

### **3.2.4.1 Performance Indicators**

T&TEC's performance indicators (compared with the "Best Practice" world wide) should consist of, at the minimum, the following:

- Customers per employee;
- Consumption per capita (Total kWh Sales ÷ Total Population);

- Service Coverage (i.e. Residential Customers x Household Density ÷ Total Population, where Household Density = Average Household size);
- Working Ratio (i.e. ratio of annual costs to annual operating revenue excluding depreciation and interest payments);
- Average Revenue per kWh (\$/kWh);
- Average sales per kWh (\$/kWh);
- Sales (\$ and kWh) per employee (Total Sales ÷ by number of Employees);
- Total System Losses (Energy purchased Total Sales or Technical Losses + Non Technical Losses);
- Operating Ratio (i.e. ratio of annual operating costs to operating revenues including depreciation and interest payments but excluding debt service payments);
- Debt Service Coverage Ratio (Gross Internal Funding ÷ by Debt Service); and
- Operating Cost per Customer (\$/Customer).

### 3.2.4.2 Other Information

The service provider should provide the following:

- forecast of number of customers by Rate class including methodology used for forecasting customers under low, medium and high growth scenarios;
- forecast of revenue by Rate class;
- forecast of energy volumes (kWh) by Rate class and Peak Demand, including methodology used for forecasting energy volumes under low, medium and high growth scenarios;
- forecast of Generation and Purchases by Generator;
- consumption Analysis of Residential Customers;
- audited Financial Statements for the last five years;
- regulatory accounts as outlined in the Regulatory Accounting Guidelines (RAGs)
   for the last four years;
- forecast of fuel cost per unit generated;
- forecast of fuel price TT\$/MMBTU;

- number of employees (Permanent and Temporary) and forecast of same;
- forecast of System Losses;
- forecast of fuel costs and method used;
- forecast of Conversion Costs and method used; and
- information on customers and/or areas/households not currently being served and projects that have been introduced or earmarked for introduction.

### 3.3 The Public Summary

The Public Summary is a stand-alone summary written with the customers in mind, to enable them to understand T&TEC's plan and strategy for the regulatory control period. It should clearly identify:

- T&TEC's deliverables with time frames for the control period, in terms of quality enhancements and service delivery, together with implications for prices and average household bills;
- T&TEC's key financial projections with underlying assumptions;
- the implications of major enhancement programmes in terms of benefits to customers;
   and
- T&TEC's targets and proposals for efficiency improvements.

### 4. MONITORING PLAN

### 4.1 Monitoring Plan

The Monitoring Plan is a public record of T&TEC's planned outputs, targets, and key activities to be delivered during the regulatory control period.

To assess the performance year-by-year, T&TEC will be required to submit its **Monitoring Plan** for the control period to the RIC within three (3) months of final determination. The RIC will stipulate the minimum requirements and reporting time frame in the final determination. The Monitoring Plan will be placed in the RIC's Library and on its website and will be distributed to stakeholders including NGO's, consumer groups, local Authorities and other interested parties.

The information to be included in the Monitoring Plan will be under the following headings:

### Outputs

The required minimum outputs and targets will be established in some detail in the final determination and monitoring the delivery of these outputs will be the primary consideration. Evidence of a likely failure to deliver the required output/improvement could trigger additional reporting and regulatory action.

### • Serviceability to Customers

Under this section, T&TEC will be required to deliver on its commitments of maintaining serviceability to customers. These commitments will be translated into projects and programmes that would be carried out during the control period. Where commitments involve renewing, replacing or extending physical assets, T&TEC will be required to detail the areas, the expected commencement and completion dates, etc.

### • Prices

The overall price limit for the regulatory control period will be set by the RIC in the Final Determination. T&TEC will be expected to submit, at least two months prior to the beginning of each year of the regulatory control period, its proposed tariffs to apply from the start of each year, for the RIC's verification of compliance. Additionally, T&TEC would be required to explain the implications of the approved tariffs for typical customers' bills in different customer classes.

### 4.2 Performance Reporting and Auditing

Apart from the Monitoring Plan discussed above, the RIC will also be monitoring and reporting annually on the performance of service providers. This is consistent with the RIC's mandate under its Act, which provides for the RIC to monitor and report publicly on the performance of T&TEC, including the quality of performance information. The RIC considers that the performance reporting framework should broadly cover the following areas of service:

- baseline explanatory data (for example, customer numbers and network length);
- quality of supply;
- network reliability and efficiency (for example, interruptions and losses);
- consumption and conservation initiatives;
- customer responsiveness and service (for example, response to service disruptions and complaints handling); and
- financial performance.