CONSULTATION PAPER

REGULATED INDUSTRIES COMMISSION

Treatment of Pension Costs for Regulatory Decision-Making

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1. BACKGROUND

The Regulated Industries Commission's (RIC) core duty is to set price limits that allow an efficient utility to properly finance its operations. The RIC has applied a "building-block" methodology in determining the total revenue requirement that the service provider can collect from customers. This methodology involves determining a total revenue requirement from component costs, as follows:

Total Revenue = Forecast Efficient Operating & Maintenance Costs (OPEX)

+ Asset Value (Regulatory Asset Base) x Rate of Return

+ Depreciation of Assets.

As part of the process of setting revenues, the treatment of pension costs is an important aspect that has implications for both customers and service providers.

Purpose

This document seeks to highlight all the issues that arise with respect to pension costs when assessing the efficiently incurred costs of providing regulated services, especially in relation to the defined benefit pension plan currently used by T&TEC. In the first rate determination for the Trinidad and Tobago Electricity Commission (T&TEC), only the ongoing pension costs were taken into account when the RIC assessed the efficiently incurred costs of providing the service. The document therefore sets out the RIC's proposals for the treatment of pension costs for future price control reviews consistent with the RIC's duties.

Responding to this Document

All persons wishing to comment on this document are invited to submit their comments. Responses should be sent by post, fax or e-mail to:

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All responses will normally be published on the RIC's website unless there are good reasons why they must remain confidential. Any requests for confidentiality must be indicated. A copy of this document is available from the RIC's website at **www.ric.org.tt.**

2. INTRODUCTION

The RIC regulates tariffs by setting a price control every five years. As part of setting the total revenue, the treatment of pension costs is one of the important aspects considered. There are fundamentally two types of pension plans:

1. Defined Contribution; and
2. Defined Benefit.

Defined Contribution plans are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and the employer has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service. Defined Benefit plans (used by T&TEC) are post-employment benefit plans other than defined contribution plans[1]. With a defined benefit plan, however, the employer is obligated to pay an employee the agreed pensionable amount regardless of the pension plan's performance. This may lead to the organization having to support the plan out of its own revenues if a deficit occurs in the plan. A deficit will arise when the total liabilities exceed the total assets of the pension plan.

1 This explanation was taken from the International Accounting Standard 19 (Employee Benefits)

All full time employees of T&TEC are members of the Commission's Pension Plan. The assets of which are invested via a separate trust administered by an independent trustee (Republic Bank Limited). The pension plan is funded mainly by contributions from both the employees and T&TEC along with revenue generated from investments. However, uncertainties about current and future levels of liabilities occur, especially for defined benefit schemes, depending on investment returns and longevity assumptions.

The RIC had approved the following employee costs for the Final Determination, June 1, 2006 to May 31, 2011 (**Table 1**).

Table 1: RIC's Allowed Employee Cost, June 2006-May 2011 ($Mn)

	T&TEC Requested	RIC Approved 2006/07-2010/11	2004 Actual	2006/07	2007/08	2008/09	2009/10	2010/11
Employees	525.58	522.48	85.49	94.55	99.29	104.25	109.46	114.93
Salaries	808.53	670.04	109.64	121.26	127.33	133.69	140.37	147.39
Employee related benefits	302.07	319.30	52.26	57.79	60.68	63.71	66.89	70.23
Total Charged to Revenue	1,636.18	1,511.82	247.39	273.61	287.30	301.65	316.72	332.54

The pension cost was included in the Employee Related Benefits for the period 2006-2010. **Table 2** below shows the employee and employer contributions to the T&TEC pension plan for the period 2004 to 2009. As shown in this table, contributions in 2009 increased by 84% compared to 2008. T&TEC has indicated that this increase was mainly due to retroactive salary payment made to its employees.

Table 2: Employee and Employer Contributions ($Mn)

Year	Employee	Employer	Total	Annual Increase	
				Amount	%
2009	31,411,395	62,822,790	94,234,185	43,125,507	84%
2008	17,036,226	34,072,452	51,108,678	1,101,183	2%
2007	16,669,165	33,338,330	50,007,495	1,133,585	2%
2006	16,291,303	32,582,607	48,873,910	3,352,855	7%
2005	15,173,685	30,347,370	45,521,055	2,674,164	6%
2004	14,282,297	28,564,594	42,846,891		

There are three related issues that arise with respect to Defined Benefit Plans:

- **Ongoing Pension Costs –** these are costs of pension benefits earned by the employees in the current period;
- **Deficit Repair Payments –** these are cash amounts, agreed with the pension scheme Trustees, which T&TEC would pay to reduce a pension fund deficit; and
- **Cost of Capital –** it is argued that the existence of a pension fund deficit may influence the cost of capital to an entity at the time of borrowing money from the market.

These issues become important and relevant to regulators for assessing the efficiently incurred costs of providing regulated services and the way these are taken into account in regulatory decisions will impact the final tariffs.

3. ASSESSMENT OF PENSION COSTS AND ISSUES

The RIC's powers and duties are provided for in statute, the RIC Act No. 26 of 1998. The RIC's principal duties are, *inter alia*, to:

- *Ensure, as far as is reasonably practicable, that the service provided by a service provider operating under prudent and efficient management will be on terms that* *will allow the service provider to earn sufficient return to finance necessary investment; and*

- *Establish the principles and methodologies by which service providers determine rates for services.*

In the performance of its functions, the RIC is required to have regard to the **public interest** and in particular:

- *To ensure maximum efficiency in the use and allocation of resources and to ensure as far as is reasonably practicable, that services are reliable and provided at the lowest possible cost; and*
- *To ensure fair treatment of consumers and of service providers similarly placed.*

Furthermore, in prescribing the procedure for the conduct of reviews under Part V of the Act, the RIC is also required to have regard to, *inter alia*:

- the funding and ability of the service provider to perform its functions;
- the interest of shareholders of the service provider;
- the ability of consumers to pay rates; and
- the following matters:
    - replacement capital cost expended;
    - least-cost operating expenses which may be incurred;
    - annual depreciation;
    - return on the rate base.

The RIC has discretion in balancing all of these statutory duties and objectives. However, some matters are likely to be of more importance than others when assessing the efficiently incurred costs of providing regulated services. The RIC must, therefore, ensure that its final decision strikes the right balance between these objectives and duties, by giving due regard to all relevant considerations, including the stakeholder comments. The RIC will also have regard to the general regulatory principles of transparency, accountability and consistency and any other principles appearing to represent the best regulatory practice regionally and internationally.

Overall, therefore, the RIC's framework to assess the treatment of pension costs must be consistent with its objectives and duties, in particular the RIC's explicit duty to finance and to ensure maximum efficiency in the use and allocation of resources, the general regulatory principles stated above and the regulatory best practice. With respect to regulatory best practice, the comparative analysis of other regulatory approaches (**Appendix I**) shows that no general approach has been adopted across the board.

3.1 Ongoing Pension Cost

As indicated above, the ongoing pension costs refer to the costs of pension benefits earned by employees for service in the current period. The RIC has an explicit duty to consider all reasonable costs in developing the revenue allowances for the service providers. The RIC ensures cost recovery by including all efficient operating expenses (OPEX), depreciation and a return on capital. The ongoing pension costs include all employee and employer contributions made to T&TEC's pension plan. The ongoing pension costs are a legitimate expense and the RIC must, therefore, include T&TEC's contribution towards the pension plan in the determination of tariffs. However, there are different ways to measure the cost of ongoing pension benefits. Some regulators allow service providers to recover the accounting charge reported in the financial statements, while others allow recovery based on cash payments. Having considered all the factors, the RIC will be guided by the following principles:

- **a.** Ongoing pension cost for employees will be included based on reported costs from T&TEC's regulatory and statutory accounts (accounting charge in the profit and loss account).
- **b.** As with other costs, the RIC will use forecasts, based on assumed/expected salary increases, to estimate the ongoing pension costs in a given year.

The RIC invites comments on its proposal to deal with ongoing pension costs based on reported costs in T&TEC's statutory accounts.

3.2 Deficit Repair Payments

Deficit repair payments are the amounts paid to the Trustee of the Plan to fund any pension plan deficit. A deficit will arise when the total liabilities exceed the total assets of the pension plan. In such circumstances, the obligation is placed on the service provider to fund the shortfall. The challenge faced by regulators is whether the service provider should bear the risks of the pension scheme deficit or customers, through regulated charges.

There are a number of factors that can influence a surplus or deficit in a pension plan, including:

- the level of risk involved in the investment portfolio;
- the macro economic performance and financial factors that may have reduced the earnings of the pension plan;
- contributions made to plan (Employee and Employer) and operating and administrative costs to manage the plan;
- the legislative changes that may have increased the cost of benefits and restricted the type of investments to be adopted by a pension plan;
- changes in life expectancy, therefore extending the duration of benefit payments; and
- the overall management of the plan.

It is clear that the management of T&TEC will have control over the level of risk involved in the investment portfolio and the overall management of the pension plan. All other factors that might affect the plan are external and management will have to have contingencies to deal with issues. Investment risk and portfolio management are entirely under the control of T&TEC's management and its trustee (Republic Bank Ltd) who are charged with managing the plan on behalf of the members. With a defined benefit plan employers will need to dip into the company's earnings in the event that the returns from the investments devoted to funding the employee's retirement fall short of Actuarial forecasts.

The level of risk that is adopted in the pension plan investment portfolio will significantly influence the performance of a defined benefit plan. Risk here refers to investment risk, that is, the likelihood of the investment's actual return being less than the expected return. Companies adopting a low risk portfolio will normally invest in government bonds, guaranteed fixed deposits, treasury bills and stable mutual funds. These types of investments earn a fixed and stable income and projections are almost always accurate. Companies opting to accept a higher level of risk in managing their investment portfolio, with the hope of earning higher returns, tend to invest in equity markets, futures, options and engage in exchange rate speculation. While this could lead to higher returns, there is also the possibility of making losses due to the risky nature of the investments adopted.

Factors that influence risks within a pension plan generally include:

- Defined Benefits to be paid to employees upon retirement. For instance, the higher the benefit the higher the return must be, thus influencing high risk investments or, alternatively, higher contributions from employees;
- Macro Economic performance; and
- Management's attitude towards risk.

T&TEC holds meetings with the pension plan trustee who presents all investment options and associated risks to the management of T&TEC. T&TEC's management then chooses the most appropriate investment options to meet its objectives. T&TEC's pension plan investment portfolio for 2006 to 2008 is shown in **Table 3** below.

Table 3: T&TEC's Pension Plan Investment Portfolio, 2006-2008

Investments	2008	2007	2006	Risk Level
Equity Securities	39%	46%	74%	High
Debt Securities	7%	8%	9%	Low
Mutual Funds	1%	12%	0%	Low
Others[2]	53%	34%	17%	High

Source: T&TEC Audited Financial Statements

2 Others consist mainly of foreign securities and mortgages.

From **table 3** it can be seen that over 50% of all investments are made up of Equity Securities and "Others" which are high risk compared to debt securities and mutual funds. Globally, in the past recessionary years of 1981, 1990, 2001 and 2008 the market value of equity drastically decreased, coupled with the mortgage subprime crisis in 2007. In such circumstances, it would seem prudent to adopt a more conservative approach, thereby leading to a more balanced portfolio.

In light of the above discussion, the RIC proposes that any loss incurred in the pension plan due to high risk investments (pension deficit payments) should not be passed onto customers when setting regulated charges, as this deficit may be as a result of management's poor decision-making in managing its pension plan assets. The RIC has also considered other factors and reasons for its proposals. These include:

- the fact that regulated charges are not decreased when the pension scheme is in surplus (i.e. when the value of the pension fund assets exceed the value of the liabilities). To be fair to customers, the beneficiaries of the scheme must bear the risks and rewards of the scheme;
- the treatment of ongoing pension costs for the revenue requirement calculations is quite consistent with the treatment of other costs of providing regulated services. However, the deficit repair payments only arise if the service provider experiences losses should the ongoing pension cost forecasts prove incorrect;
- the exclusion of deficit repair payments would be quite consistent with the RIC's duties as set out in the Act, especially with respect to the promotion of economy and efficiency;
- the allowance of a pass through of pension deficit repair payments would reduce incentives to minimize costs and remove incentives to take appropriate action to manage the pension liability; and
- the compensation of the risk if borne by the customers would mean that the service provider would be consistently over-recovering costs.

International Experience in the Treatment of Deficit Repair Payments

Most UK regulators had to deal with defined benefits pension plans and there has been no one consistent approach for the treatment of deficit repair payments. Some have taken a principled stand of not allowing the deficit repair payments to be passed through in tariffs to customers. Others have gone as far as suggesting that all new employees should join Defined Contribution plans so that the issue of deficit repair payments would not arise in the future, while some have allowed partial recovery.

However, even in the case of partial recovery, it is helpful to consider the Competition Commission's (CC), UK, decision with respect to Bristol Water where the regulator for water industry in the UK, Ofwat, had originally proposed to allow Bristol Water the recovery of only 50% of deficit repair payments in regulated charges. After analyzing the issue and in light of the principles and objectives which apply in relation to determinations made by Ofwat (for example, duty to finance functions and the promotion of economy and efficiency), the CC:

> "*noted the significant steps Bristol Water had taken to control its pension liabilities, the residual level of control it had and the further steps it might take*".

Balancing these considerations, the CC decided to allow 90% of pension deficit recovery costs for Bristol Water's defined benefits schemes. It is interesting to note that the CC decided that 90% of pension deficit recovery costs should be allowed for the defined benefits schemes that were closed to **new entrants**. The CC also rejected Bristol Water's argument that the duty to finance took priority over the duty to promote economy and efficiency. The CC also emphasized that:

> "*our determination reflects the specific circumstances of Bristol Water and its pension schemes. Accordingly, our view of how its pension should be treated in **this review** period should not unduly influence Ofwat in future determinations*".

In light of the above discussion, the RIC proposes the following:

- the deficit repair payments will not be allowed when considering T&TEC's regulated charges, as these payments reflect losses over and above the ongoing pension costs;
- as any other cost treatment under the incentive regulation, T&TEC experiences gains or losses where the actual cost differs from the forecast. T&TEC should therefore be

subjected to risks and rewards of the forecast being lower or higher than the cost even in the case of ongoing pension costs;

- T&TEC should adopt an investment portfolio that is balanced with respect to risk levels and be prudent in making investment decisions; and
- T&TEC should consider adopting a defined contribution pension scheme for new entrants.

The RIC invites comments on its proposal for the treatment of deficit repair payments and whether these payments should be considered when calculating regulated charges.

3.3 Cost of Capital Issue

Under the building-block methodology used by the RIC to calculate revenue requirements, it is necessary to estimate the return that the service provider should earn on its invested capital. This is determined by multiplying the assumed cost of capital by the RAB. The cost of capital represents the return a service provider must generate in order to raise capital on the market. A loan taken to support a pension plan in deficit will directly increase the cost of debt and result in a higher cost of capital. With a higher cost of capital the revenue requirement will also increase, thus increasing tariffs. Currently this may not be relevant to T&TEC as the pension plan is operating with a surplus. However, if the plan goes into deficit, overall risk may rise and therefore cost of capital will be higher and this can increase the cost to customers. The issue therefore is whether the regulator should make adjustments to the cost of capital to reflect the impact of a defined benefit pension scheme.

Since the RIC's proposal is not to allow deficit repair payments in price controls, it would be inconsistent to make any adjustment to the cost of capital. The service provider must bear the risks and rewards of the pension scheme.

The RIC invites comments on whether interest from debt financing to support pension deficit should be included in the cost of capital calculation or whether any upliftment of the cost of capital be allowed.

4. INFORMATION REQUIREMENTS

In order to have full understanding of the defined benefit pension scheme, the RIC would require information to determine the appropriate ongoing pension costs and risks associated with the investments. This information should also be provided in instances where there is a shortfall in the pension plan earnings, thus allowing the RIC to understand the full extent of T&TEC's contribution to maintaining the stability of the plan. The information should also indicate whether employees themselves need to contribute more towards meeting the deficit, if any. In this regard, T&TEC will be required to submit the following set of information in the future:

- The formula and factors used in determining the defined Benefit. The current formula for the defined benefit includes the final salary, Number of years in service and Accrued Interest.
- An analysis of pension plan investments, stating par values and movement in the fair value of investments, showing gains and losses on pension plan assets.
- Analysis of total expenses incurred in pension plan.
- Audited financial statements of the pension plan.
- Annual valuation report on obligations and Full valuation report (carried out every three years).
- Projected salary increases and any changes to employee and employer contributions towards the pension plan.
- Detailed information pertaining to employee salaries and wages, separating employee related benefits to clearly show the value of each element e.g. NIS, Pension etc.
- In the event of a short fall in the pension plan, the RIC will expect a clear declaration of T&TEC's additional contribution to the pension plan excluding monthly Employee/Employers contributions. This will allow the RIC to understand the monetary support T&TEC has provided to the pension plan. The RIC will also expect a detailed plan on how T&TEC intends to fund the deficit repair payments.

5. CONCLUSION

This document assessed the treatment of pension costs against the RIC’s duties and objectives under its Act and provided details as to how the RIC will treat pension costs for the Electricity Transmission and Distribution service provider (T&TEC) and how the RIC will apply its decisions at future price control reviews.

The RIC would like to receive comments/submission on its proposals. The submissions it receives in relation to this document will be thoroughly considered before any decision.

APPENDIX I

Summary of UK Regulators decisions on Pension Costs[3]

REGULATOR	DUTIES	ONGOING SERVICE COSTS	DEFICIT REPAIR PAYMENTS	COST OF CAPITAL
CAA'[4] treatment of BAA[5] (Regulator of Airport Authority)	No explicit duty to finance	Allowed: Cash Basis	Previous charge control assumed the pension scheme was in balance	No adjustment made
CAA's treatment of NATS[6] (Regulator of Airport Authority)	Include duty to finance	Allowed: Cash Basis	Pension fund was in surplus at time of current charge control	CAA stated that pass-through arrangement for cash costs should reduce the cost of capital
OFGEM (Regulator of Electricity)	Include duty to finance	Allowed: Cash Basis	Allow all 'efficient and economic' deficit repair payments	No adjustment made – Although considered in latest consultation
OFWAT (Regulator of Water)	Include duty to finance	Allowed: Cash Basis	Allow 50% of deficit repair payments (based on 10 year recovery period)	No adjustment made
ORR (Regulator of Rail)	Include duty to finance	Allowed: Cash Basis	No specific policy – Pension deficit was not substantial at last charge control	No adjustment made
POSTCOMM (Regulator of Post)	Include duty to finance	Allowed: Cash Basis	Allows recovery of deficit over 17 year period	No adjustment made
OFCOM (Regulator of Telecom)	No explicit duty to finance	Allowed: Accounting Basis	No allowance for deficit payments	No adjustment made

3 OFCOM 2nd consultation on pension review publication date 23-July-10.

4 UK Civil Aviation Authority

5 British Airport Authority

6 National Air Traffic Services