

**REVISION OF THE
CAPITAL
CONTRIBUTION POLICY
FOR THE
TRINIDAD & TOBAGO
ELECTRICITY
COMMISSION**

**March
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This document is a summary of the RIC's review of the Capital Contribution Policy for T&TEC. It highlights the RIC's proposals for key areas of the Policy. Comments are invited on the proposals.

**Summary
Document**

BACKGROUND

A capital contribution (CC) is a cost that is paid upfront to facilitate infrastructure works that are initiated by customer's requests. CC is used to recover from individual customers the specific costs their request imposes on the network. At present, some customers of the Trinidad and Tobago Electricity Commission (T&TEC) are required to make CCs for some network costs under the RIC's 2009 Capital Contribution Policy (CCP (2009)).

The CCP (2009) was formulated to ensure that a fair and transparent policy was established for connections that require upgrade or extension to the local network and wider networks, and that T&TEC (and by extension its customer base), would not unduly subsidise this expense. The approach and methodology laid out in the CCP (2009) established that new customers would pay for electrical works that were not budgeted under T&TEC's forecasted network development (as per the RIC's 2006 Final Determination of Rates and Tariffs for T&TEC) and that the CC cost would be calculated in a consistent and transparent manner.

The RIC addressed the following key areas of concern surrounding CCs in the CCP (2009):

- 1. Pricing Principles;**
- 2. Payment of Capital Contribution and Connection Point, and Capital Contribution Calculation Method;**
- 3. Contestability;**
- 4. Reimbursement;**
- 5. Ownership of Customer Contributed Assets;**
- 6. Recognition and Valuation of Customer Contributed Assets;**
- 7. Dispute Resolution; and**
- 8. Monitoring of the CCP.**

For this review, all critical elements of the CCP (2009) have been deliberated upon by the RIC in conjunction with the review of CC policies and strategies in other jurisdictions which utilise similar regulatory frameworks such as the UK, Australia and New Zealand.

Concerns that arose during implementation of the CCP (2009) in terms of the principles and administration of the policy, as well as suggested amendments articulated by T&TEC and customers have also been taken into consideration in this review. Highlights of the RIC's review are presented below.

CPP REVIEW & PROPOSALS

1. Pricing Principles

The following three principles currently apply:

- Economic efficiency- that is, prices should reflect the economic costs of service, signal future investment costs, and should encourage productive and allocative efficiency.¹
- Promote equity, stability and consistency of outcomes - that is, having regard to the impact of tariffs on customers and being consistent and transparent.
- Cost recovery – that is, prices, as far as possible, should fully recover the costs of efficient operations.

Given the developments in alternative supply technologies (e.g. renewable energy (RE) technologies) and the Government's mandate to increase RE penetration in the market, the RIC proposes to include the following as a principle.

- Discourage uneconomic bypass – that is, the prices should not encourage consumers to bypass the network for an alternative supply.

2. Payment of Capital Contribution and Connection Point (charging policy) and Capital Contribution Calculation Method

Under the CCP (2009), the point of connection is defined as that point on the network where the use of assets changes from a shared basis to assets fully dedicated to a customer. The general rules and exceptions regarding the payment of CCs were outlined as follows:

- Customers are responsible for all connection costs up to the point of connection;
- The service provider is responsible for all other costs beyond the point of connection and is required to demonstrate that the connection is not commercially viable without that CC;
- A CC should be no more than the amount that would be required to make the extension commercially viable; and
- Augmentation assets will be required to be at the least cost and optimum size required.

Exceptions to the General Rules:

- Commercial customers are only required to meet the costs of augmentation works to the local network if provision has not been made for such works within T&TEC's price limits;
- Where the connection is for a large load customer, the funding for the connection² to be paid up-front (if any) will be negotiated between the service provider and customer; and

¹ Productive efficiency is concerned with the optimal method of producing goods; producing goods at the lowest cost. Allocative efficiency is concerned with the optimal distribution of goods and services

² Including the network augmentation costs (for both the local and remote network).

- Where the connection is for a multi-occupant development (i.e. a multiple lot development), the developer will be considered as a single customer and will be required to fund all low voltage (LV) and high voltage (HV) assets required to connect that development, once they are for the exclusive use by the development. If these assets can be shared by customers outside the development in the vicinity of the building, the following will apply:

1. For single-phase HV spur line extensions from the network to the development/building, T&TEC is responsible for extension up to the development.
2. For 2 or 3-phase HV line extensions from the network to the development/building, the developer shall pay two-thirds (2/3) of the full cost of the HV assets.
3. The developer shall pay the full cost of the electrical infrastructure within the development.
4. The owner of a multi-occupant building will, in instances where there are five (5) or more metered accounts (regardless of the customer classification) or two (2) or more non-domestic accounts in the building, be classified as a developer and will be responsible for all costs associated with making an electricity supply available to the building.

The classification of owners of buildings with multiple meter bases is outlined in the table below.

Classification of the owners of buildings with multiple meter bases

COMBINATION OF METERS (classified by Tariff Class)³	CLASSIFICATION OF OWNER
2 Rate A accounts 3 Rate A accounts 4 Rate A accounts 1 Rate A and 1 Rate B account 2 Rate A and 1 Rate B account 3 Rate A and 1 Rate B account	Owner is not classified as a developer. Capital Contribution Formula will be applied.
2 or more non-domestic accounts 5 or more accounts (any classification)	Owner classified as a developer. Required to pay the full cost of capital works.

³ Rate A customers are classified as “All domestic and household electricity supplies for use by one family living in one residence, supplied from one meter.”

Rate B customers are classified as “Electricity supplies for purposes other than domestic and household in a single installation supplied from one meter.”

The RIC established a “Shallowish”⁴ approach for connection charging for Rates A to D4⁵ customers and implemented an incremental approach to calculate CC payments, where project costs will be confined to work on the local network. Currently, the following formula applies to these customers:

$$CC = IC - IR_{(n=10)}$$

Where:

CC = Capital Contribution

IC = Project Costs (Capital Costs associated with the connection)

IR_(n=10) = Incremental Revenue (present value of a 10-year revenue stream directly attributable to the new connection (calculated using a discount rate that is equal to the cost of borrowing allowed in the price limits).

With the incremental approach, the customer pays a CC when the present value of the future revenue stream from the connection is insufficient to cover the cost of the connection.

For the very large industrial customers (i.e. D5, E1 to E5)⁶ a deep approach was adopted, as such these customers bear the full capital costs of connecting to the network, that is, the associated connection costs as well as all augmentation costs (costs of the local network as well as the remote network). Also, the project costs, for all customer categories, only include the capital costs of the assets associated with the new connection. All recurrent costs (maintenance and operation) are to be recouped through the tariffs.

The RIC is of the view that the application of a single approach to cost charging for customers across rates classes A to D4 that require varied connection services and consume electricity at varying quantities, needs to be revisited. Hence, while the RIC proposes to maintain the current arrangements for rate A to B1, multi-occupant development and multi-occupant buildings. A deep charging approach will now be applied to all industrial rate categories, who will bear the full cost of connecting to the network. Deep charging principles will also apply to Rate A - B1 customers who require an enhanced connection⁷ hence they will bear the full capital costs.

⁴ Service providers typically adopt one of three (3) broad approaches to derive charges for connection to their networks. They are as follows:

A “deep” connections policy - estimates the total costs that will be incurred as a result of connecting new load to the system, including the costs of all network reinforcement.

A “shallowish” connections policy – estimates the connection assets, excluding the costs of reinforcement at higher voltage levels. Reinforcement costs are confined to the “local network” that is, the area close to the point of connection. Costs can include more general reinforcement costs if the party to be connected (connectee) is the main user of the asset.

A “shallow” or “local” connections policy- estimates the cost of those assets that are required to connect a customer to the system, excluding the costs of extension and reinforcement of the distribution system. This type of connection only reflects the costs of providing the service line or cable necessary to connect a customer to the system.

⁵ A- Residential, B- Commercial, B1- Commercial, D1- Small Industrial, D2 - Medium Industrial, D3- Large Industrial, D4 – Large Industrial.

⁶ D5- Large Industrial- Standby, E1- Very Large Load, E2- Very Large Load, E5- Very Large Load.

⁷ Requests for a connection service that has increased reliability standards, dedicated assets and upgrades from overhead to underground service assets are some of the services that are considered to be enhanced connection services.

The RIC proposes that the current formula applied under the incremental approach be maintained.

The RIC is mindful of situations where T&TEC's incremental revenue, generated by the sale of electricity to new industrial or commercial customers, has fallen short of the projected amount in the calculation of CC charges, when consumption is less than projected.

The provisions included in CCPs, to treat with similar circumstances, have varied by jurisdiction, however, three (3) of the observed approaches are as follows:

- 1. Financial Guarantee - customers are required to provide the utility with a financial guarantee, which secures the utility a certain level of revenue in relation to the augmentation that the utility has funded for the customer's benefit.**
- 2. Security Fee - customers are required to pay a security fee that is capped at the amount of incremental revenue that is assessed as being at risk. The fee will not exceed the present value of the connection cost. An annual rebate of the security fee will be provided when the customer's actual electricity use is verified.**
- 3. Reduced demand payment - the utility may recover a reduced demand payment if a customer gives notice to reduce the contracted capacity at a contracted point; or terminate the user's access contract, within the cost recovery period, such that the user's access charges are reduced; and no other user is likely to pay access charges in respect of that contracted point within the cost recovery period.**

The RIC proposes that a Security Fee be implemented to eliminate the risk of shortfalls in incremental revenue. This will apply to the customers that are charged under the incremental approach.

3. Contestability

The contestability provision allows customers to have the option of using either T&TEC's or contracted labour (prequalified by T&TEC) for capital works associated with their connection to the network. The contestability provision remains a necessary component of the CCP.

The RIC proposes that going forward, T&TEC must make a strong case for the RIC's approval before contestability is restricted when competent contractors are available to undertake such works.

4. Reimbursement

A reimbursement/rebate scheme ensures that all customers share in the total cost of the infrastructure. When a customer obtains a connection to the network using assets that another customer-funded, the latter customer is required to fund a portion of the cost of those existing assets, and the contribution is reimbursed to the original customer. The period over which reimbursements may be offered is limited to six (6) years. The original customer is reimbursed only when a new customer(s) has paid all the amounts due and has been connected to the supply.

The RIC's view is that the reimbursement scheme under the CCP remains fit for purpose.

5. Ownership of Customer Contributed Assets

Under CCP (2009), contributed assets are vested in the service provider to avoid customers having the responsibility for maintenance and replacement of these assets. This treatment of contributed assets is customary among the jurisdictions researched.

The RIC proposes to maintain this treatment of contributed assets where T&TEC will own all the connection assets and network service assets that have been funded by CCs, regardless of whether the CC is made by the customer as a financial payment or as a contributed asset.

6. Recognition and Valuation of Customer Contributed Assets

The recognition and valuation of contributed assets are a feature of CCPs that articulate how contributed assets are to be treated in terms of ownership and valuation. Contributed assets are also treated as part of the Regulatory Asset Base (RAB) to calculate depreciation charges to ensure replacement, but not for the calculation of a return on capital since the service provider does not pay for the assets. In terms of valuation, Contributed assets are being treated no differently than other assets owned by T&TEC.

The RIC is of the view that the principle should be retained as it remains fit for purpose.

7. Dispute Resolution

The CCP (2009) provides several options for customers and T&TEC to seek recourse in the event of a dispute. All customers have access to the dispute resolution process as approved by the RIC under the "Codes of Practice for T&TEC". Furthermore, either party can provide the RIC with written details of the complaint to facilitate resolution in accordance with the provision of the RIC Act. Additionally, T&TEC or the customer has the right to refer the matter to an independent body for either mediation or arbitration.

The RIC proposes to maintain the above-mentioned options for dispute resolution under the CCP.

8. Monitoring

The RIC intends to implement a more stringent and comprehensive monitoring of T&TEC's administration of the CCP going forward. The RIC proposes that T&TEC be required, but not limited, to report the following information to the RIC by distribution area on a biannual basis:

- a. the technical scope of CC works executed, disaggregated by project;
- b. the cost to T&TEC disaggregated by project;
- c. the time taken to complete the works and any breaches of the respective QSS;
- d. the capital contributions paid, disaggregated by project;
- e. the collection and remittance of reimbursement payments;
- f. the details of disputes including the nature of the dispute, method of resolution and outcome;
- g. The number of jobs done by certified contractors, and by T&TEC in-house crews; and
- h. The number of new customer accounts added that paid a capital contribution.

OTHER RELEVANT MATTERS FOR CONSIDERATION

Underground Infrastructure in Developments

The CCP (2009) makes no distinction between overhead or underground infrastructure and there is currently no legal requirement that mandates underground assets for new developments. However, customers should be informed about the cost implications of infrastructure and be allowed to decide on the type to be installed for their connection. The cost methodology outlined for multi-occupant developments should be applied to both overhead and underground infrastructural works.

Disclosure of Costs (including Third-Party Costs)

T&TEC has indicated that there are costs that are often indirectly related to the customer's request for a supply and which are paid to a third party by T&TEC. The RIC proposes that such costs are to be borne by the customer. Further, T&TEC's CC letters to customers should provide details on the computation of CCs, inclusive of material, labour, transport costs, and third-party costs and should refer to the prevailing CCP.

Connection of Small Scale Distributed Renewable Energy Generation Systems

The CC requirements for small embedded generators are typically based on the connection characteristics and/or the cost to connect the system. In the local context, similar specifications will need to be developed for the Feed-in-Tariff scheme which is being developed to facilitate the integration of micro RE generation systems.

All persons wishing to comment on the document, "Revision of the Capital Contribution Policy for T&TEC" are invited to review the main document at www.ric.org.tt and submit comments using any of the options provided.