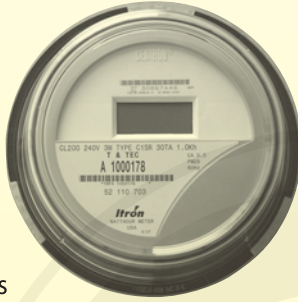


AMI Project

The Advanced Metering Infrastructure (AMI) Project allows T&TEC to read customers' meters remotely via Cell Connector Units (CCU), which collect and transmit readings to servers located at T&TEC's Head Office.



The AMI project is being carried out on a phased basis and involves the changeover of old electro-mechanical meters to the new electronic AMI meters. The project first started on December 10th 2007 with the first phase being in Barataria and Port of Spain. Presently, the project is 75% complete with about 300,000 of the 400,000 meters already changed over. With most of the meters changed out in Trinidad, the final phase of the changeout is taking place in Tobago. The AMI project is estimated to be complete by June 2009.

AMI meters can be read remotely. This eliminates the need for meter readers to enter customers' premises and allows on-demand readings to facilitate faster resolution of enquiries and account transfers. Readings are precise; therefore, estimated billing is eliminated. This infrastructure also provides the Commission with early detection of defective meters and power outages, when integrated with the Outage Management System, to allow for faster restoration times.



Today, T&TEC is the largest Transmission and Distribution Electric Utility in the English Speaking Caribbean.

As Trinidad and Tobago develops, the Commission will no doubt continue to be responsive to the changing demand of the industrial, commercial and domestic sectors. The rapidly increasing demands of industry in particular, will require of the Commission continued adherence to prudent utility practices, while investigating and utilizing where appropriate, new technologies, techniques and business models.

T&TEC is the only electric utility in the Caribbean that powers world-scale steel, methanol and oil production companies, as well as the highest concentration of ammonia producers anywhere in the world.

The Commission offers efficient, reliable and economical energy, supported by a first-rate professional work force dedicated to helping companies exceed business objectives.

We are T&TEC; on the cutting edge of technology, providing quality service our customers have grown to depend on...the kind of service you too can expect from us.



The power to make it work

Trinidad and Tobago Electricity Commission
63 Frederick Street, Port of Spain
Trinidad, West Indies
Tel: (686) 623-2611/7 or 623-6291/6
Website: www.ttec.co.tt

May 2009

Trinidad and Tobago Electricity Commission

The Nation's Sole Transmission & Distribution Utility

VISION

*Leadership in Energy Delivery,
Excellence in Customer Service...
enhancing the quality of life for all.*

MISSION

*To provide a safe, reliable, high quality
electricity supply, in an environmentally
responsible manner, utilizing best practices,
through empowered employees committed to
excellence and customer satisfaction.*



The power to make it work

The Trinidad and Tobago Electricity Commission (T&TEC) was established in 1945 and began operations on 1st January 1946. Its mandate was to generate and distribute electricity outside of the city of Port of Spain and the town of San Fernando.

In April 1961, the Commission took over the operations of the Port of Spain Corporation Electricity Board and distribution system from the San Fernando Borough Council and thus became the single unified **public electricity supply industry** for the country.

During the period 1946 to 1961, much of the early expansion that was to shape the utility took place:

- Establishment of Penal Power Station to take advantage of the natural gas fuel available in the south.
- Expansion of the system in the north as far west as Carenage, as far east as Toco and south to Chaguanas.
- Expansion in the south to Santa Flora, Rio Claro, Mayaro and the then new Navet dam site.
- Establishment of an electricity service in Tobago.

The north and south systems in Trinidad were integrated in stages during the sixties establishing a 66 kV transmission between them. In 1965 the Trinidad system and Tobago system were

interconnected for the first time through the laying of a 42 km 33 kV submarine cable.

In 1961 T&TEC's customer base was 99,000, with a maximum electricity demand of 52.5 MW and with sales of 233,000 MWh. In 1994 T&TEC served 299,600 customers, sold 3,461 GWh and recorded a maximum electricity demand of 607 MW.



A T&TEC Linesman at work.

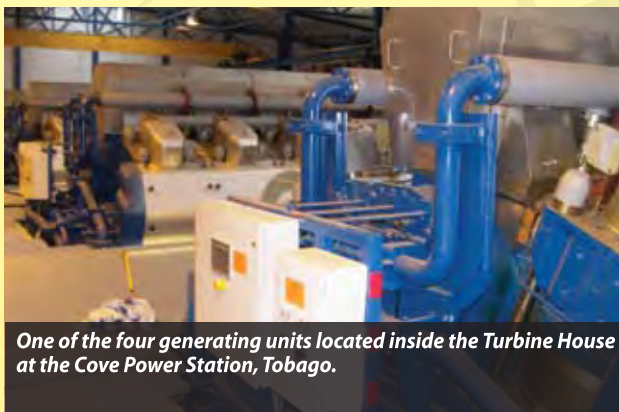


One of T&TEC's new, state-of-the-art 'yellow trucks'.

The Power Generation Company of Trinidad and Tobago (PowerGen), was established in December 1994. Powergen was vested with the generation assets of the Commission's Port of Spain, Pt. Lisas and Penal Power Stations.

Forty-nine percent equity in PowerGen was then divested to a consortium of Southern Electric International and Amoco (BP Houston). On August 8, 2007, Marubeni Corporation purchased the 39% equity shares of Mirant Caribbean Holdings through its wholly owned subsidiary Marubeni Caribbean Power Holding Inc. (MCPH) of Georgia, USA and BP Houston continues to own 10%. On February 18, 2009, half of MCPH's equity was sold to Abu Dhabi National Energy Company (TAQA). T&TEC retains the remaining 51% equity. (T&TEC is still responsible for the generation of electricity in Tobago, where a standby facility is located in Scarborough).

In 2007, two Siemens Westinghouse 104 MW generators were added to PowerGen's Pt. Lisas Power Station to bring PowerGen's total generating capacity to 1,377 MW. Their generating capacity consists of 300 MW of steam and combustion turbine alternator plant at Port of Spain Power Station; 842 MW of **In**



One of the four generating units located inside the Turbine House at the Cove Power Station, Tobago.



The 66/12 kV Substation at the Cove Power Station, Tobago.

combustion turbine alternator plant at Point Lisas Power Station and at Penal Power Station, a total of 235 MW of combustion turbine alternator and combined cycle plant.

Presently, the only other generation provider is Trinity Power Ltd, formerly known as InnCOGEN after a change in ownership in 2004. The InnCOGEN 225 MW Power Plant at Couva was commissioned in 1999.

The island of Tobago is fed from Trinidad via 2 submarine cables. The submarine cables are rated at 20 MW and 25 MW respectively. The island's maximum demand is 38.36 MW, which was recorded on 20th April 2009.

In the event of an interruption in the supply from Trinidad, the Standby Generating Plant at Scarborough is utilized. This plant, which consists of eight diesel alternator units, has an installed capacity of 21.7 MW. All eight units utilize diesel fuel for operation. The Cove Power Station in Tobago, which is under construction, is due to be commissioned in November 2009. The Cove Power Station will have an installed capacity of 64 MW comprising four 16 MW diesel engine generators capable of running on both natural gas and diesel fuel.

The primary fuel for all generating plants in Trinidad is natural gas. Only the plant at Port of Spain is capable of liquid fuel operations. The steam plant can be operated on Bunker-C fuel oil and the combustion turbines can run on Jet-A grade kerosene.

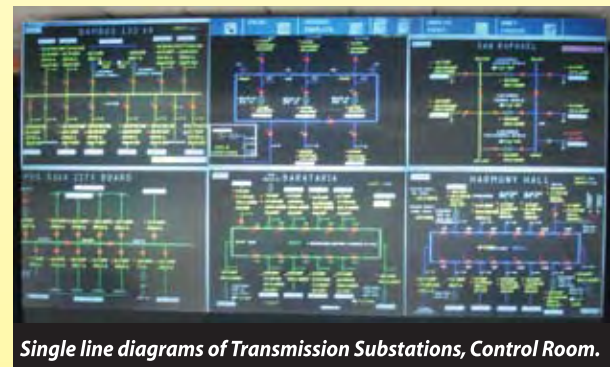
2008, T&TEC had 402,010 customers with sales of 7,722 GWh. The highest recorded maximum demand to date was 1,181 MW, which occurred on June 18th 2008. T&TEC's single largest customer is ArcelorMittal, which operates a large steel making facility on the Industrial Estate at Pt. Lisas.

The rapid growth of its sales and generating capacity has precipitated a similarly rapid expansion of T&TEC's transmission system.

T&TEC's operations began with a 33 kV supply. National development directed the establishment of a national grid with the highest system voltage of 132 kV. A further increase is expected by 2020 with the addition of 220 kV transmission lines in 2010.



A 132 kV double circuit overhead transmission line.



Single line diagrams of Transmission Substations, Control Room.

This complex system of 34 generating units and over 30 transmission substations at three voltage levels, along with dozens of sub-transmission substations, is managed minute by minute, twenty-four hours a day via a state of the art Supervisory Control and Data Acquisition (SCADA) system which was installed in 1982 and upgraded in 2000.