

REVENUE RECOGNITION

Each year in our Annual Report we explain an aspect of our accounts which is of particular importance or relevance to our shareholders. In this year's "Accounting Mini-series", we would like to explain the principle of revenue recognition and how revenue is measured and recognised. As electricity business is our core business, our focus will be on the revenue derived from the sales of electricity.

When can revenue be recognised?

To recognise electricity sales revenue, there are two key conditions to be met according to Hong Kong Accounting Standard (HKAS) 18 "Revenue":

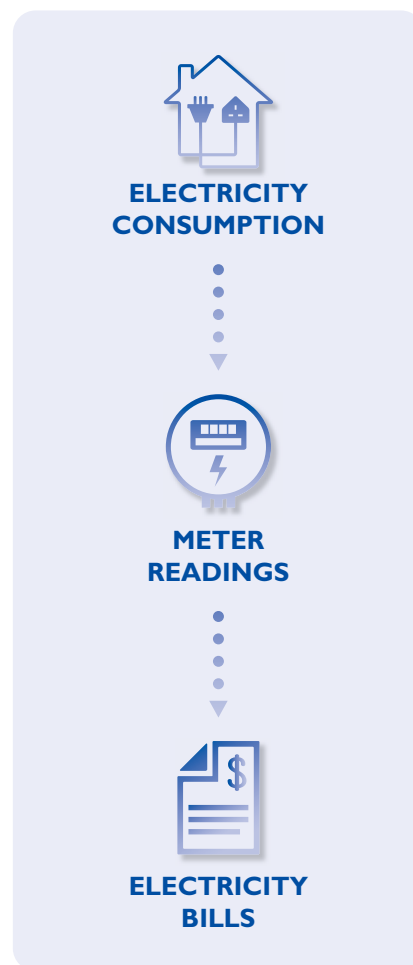
1. Significant risks and rewards of ownership of the goods have been transferred to the buyer. In our case, when the customers consume the electricity, we have performed our obligation.
2. It is probable that the economic benefits associated with the transaction will flow to us. This requires us to measure the electricity consumption and the corresponding revenue reliably. It involves a billing system and an estimation technique.

How do we measure electricity sales revenue?

Let us go through the way we measure our electricity sales.

Billed revenue

We bill our customers when they consume electricity. We read the electricity meters which record the electrical power consumed by the customers for a fixed period. Obviously, our meter readers cannot read all the meters on the same day. Therefore, different customers may have different meter reading dates. Based on the meters read, we issue bills to our customers. The customers are notified to settle the bills within the prescribed credit period.



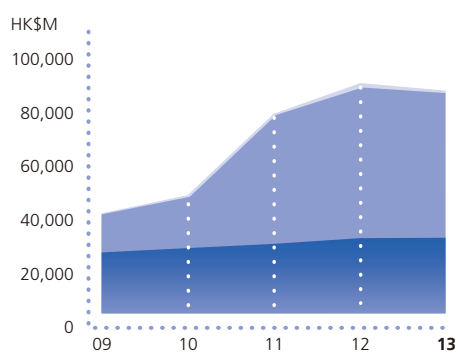
Unbilled revenue

For financial reporting purposes, we will close the accounting books for reporting to our shareholders twice a year (i.e. at 30 June for interim reports and 31 December for annual reports). The basic accounting principle applies an accrual method of accounting. We are required to estimate and accrue revenue between the meter reading dates and the book closing dates (i.e. unbilled revenue) in our financial statements.

Electricity Sales Revenue (2009-2013)

By Region

- Others
- Electricity sales revenue from Australia
- Electricity sales revenue from Hong Kong



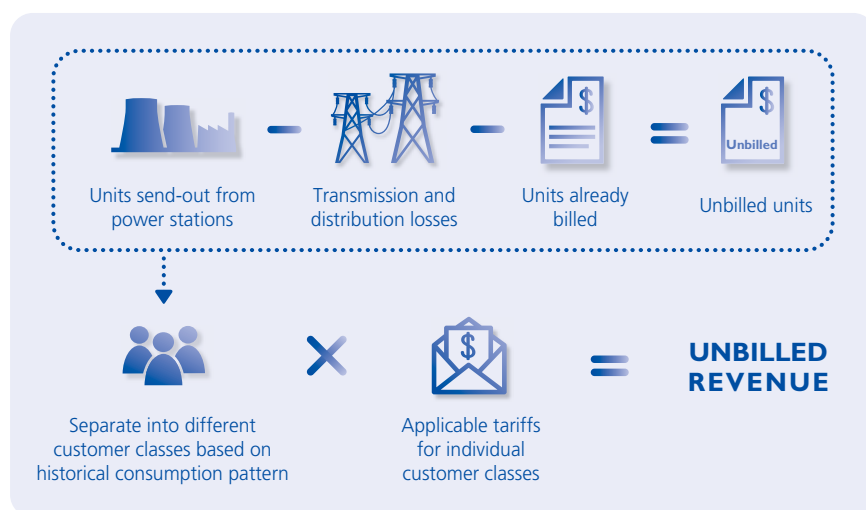
The challenges we face are to ensure that the unbilled revenue is estimated reliably and it is probable that the bills issued subsequently will be settled. Significant judgment is exercised on these aspects.

(a) Reliable measurement

To estimate the unbilled revenue, we need to know (1) the estimated units consumed and (2) the applicable tariffs.



Hong Kong electricity business has a comparatively simple tariff structure and stable electricity consumption. As a result, we can use the following top-down approach in estimating the unbilled revenue.



Electricity market in **Australia** is far more complicated. Our operations in Australia are separated into wholesale and retail segments.

For our wholesale business in Australia, electricity is sold to the National Electricity Market (NEM), where the prices of which are fixed every 5 minutes. As wholesale transactions are real-time transactions, both the units sold and prices are properly recorded. Estimation of wholesale revenue is more straightforward. However, estimation of unbilled revenue for retail business is a real challenge. Retail tariffs are variable for different customer segments and consumption periods to

reflect the costs of electricity due to the demand and supply. For example, tariff for the commercial segment is higher during office hours (i.e. peak hours) while during the same period, it is lower for the residential segment (i.e. off peak hours). In Australia, it is not uncommon for the customers to switch from one energy supplier to another. As such, track records on the past consumption pattern of the customers may provide limited information for estimation. In that case, to measure the unbilled revenue reliably, a good billing system and a proven analytical model are essential. They should not only be able to provide the relevant information to estimate the units consumed, but also the applicable tariffs for that period.

(b) Probability that bills subsequently issued will be settled

The probability that the customers will pay for the bills issued subsequently is assessed taking into account the prevailing economic conditions, the credit risk characteristics of different groups of customers and on the basis of historical loss experience. For those customers who have placed cash deposits or bank guarantees to their accounts, the probability that we can collect the debts is high. However, there may still be issues such as disputes on measurement or financial liquidity problem which may jeopardise the collectability of the unbilled balances.

SMART METER – A SOLUTION JUST AROUND THE CORNER

The barrier of reliable measurement of revenue is the on-site meter readings. With the advancement of smart grid technology, smart meter is now available which enables two-way communication between the meter and the central system. It can record consumption of electric energy in intervals and communicates that information back to us for monitoring and billing purposes. With the expectation of the wider application of smart meters in the electricity infrastructure, hopefully in the near future, we can rely on this new

technology in measuring the revenue efficiently, accurately and timely.



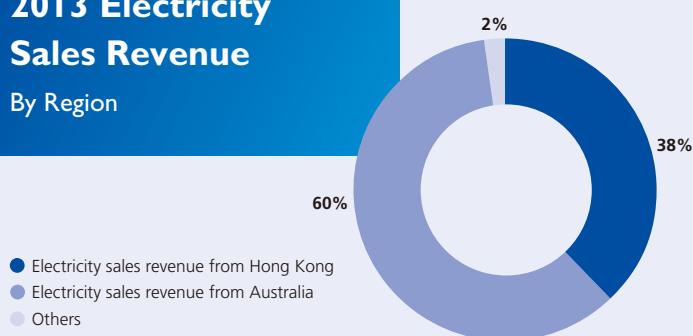
← Smart meter

THE DIFFERENCES IN REVENUE RECOGNITION OF ELECTRICITY BUSINESSES IN HONG KONG AND AUSTRALIA

You may be curious why electricity sales revenue from Australia is much higher than from Hong Kong. Excluding the effect due to differences in sales volumes and tariffs of Hong Kong and Australia, this, in fact, reflects the different business models and market structures in these two regions.

2013 Electricity Sales Revenue

By Region



Electricity is provided to our customers through three main processes:



Hong Kong
electricity business

In Hong Kong, we engage in the electricity generation, transmission and distribution business. We purchase electricity from Castle Peak Power Company Limited (CAPCO) (40% owned) and Guangdong Nuclear Power Joint Venture Company, Limited (GNPJVC) (25% owned). Electricity purchased is then transmitted and distributed to the customers through our transmission and distribution networks.

According to the accounting standards, we account for the investments in CAPCO and GNPJVC by using the equity method of accounting. As such, wholesale revenues derived by CAPCO and GNPJVC are not consolidated to the Group's revenue. Instead, we share the net profits of CAPCO and GNPJVC. Our consolidated financial statements therefore only include the retail revenue derived from CLP Power's transmission and distribution business.



Australia
electricity business

We own generation and retail businesses in Australia. Australian electricity market is substantially deregulated. Electricity generated from our power plants is sold to NEM, which is transported via high voltage transmission lines to electricity distributors, who deliver it to the customers.

The transport of electricity from the generators to the customers is facilitated through a spot market where the output from all generators is aggregated and instantaneously scheduled to meet demand through a centrally-coordinated dispatch process.

Under this market structure, our revenue from the electricity sales is

attributed to two separate operating activities:

1. wholesale electricity revenue generated from the power plants for sales to NEM; and
2. retail electricity revenue for purchases from the spot market and sales to our customers.

The wholesale revenue will not be eliminated by the power purchases at the retail segment upon consolidation because the transactions are with different counterparties outside the Group. As a result, electricity revenue from Australia business, which includes both wholesale and retail revenues, is higher than from Hong Kong business.

"WE OWN GENERATION AND RETAIL BUSINESSES IN AUSTRALIA. AUSTRALIAN ELECTRICITY MARKET IS SUBSTANTIALLY DEREGULATED..."