

# City Talk



## LET THERE BE LIGHT, ALL THE TIME

Though most of us will take for granted that whenever we flip the light switch, there will be instant brightness, it would not do justice to Hong Kong's infrastructure if we didn't recognize our reliable power supply.

Our power supply system is probably the most reliable in the world.

Some may think this high reliability is excessive and costly, but I like to invite you to imagine what would happen if we suffered a blackout in Hong Kong.

Most of us live and work in multistory buildings, which means that at any one time, there may be thousands in lifts.

Should there be any interruption in power supply, there won't be enough fire brigade personnel to free them.

The losses to commercial activity would also be too expensive to bear, as most do not have standby power supplies.

Our power system, all the way from generation, transmission and distribution, has been designed to operate at a high level of reliability, achieving over 99.999 percent. This translates to a power outage of a minute over a period of many decades.

Our electricity tariffs are regulated under a scheme of control.

Changes in charges are endorsed by the Executive Council, but no formal approval is required.

The scheme of control guards against utilities overcharging and making an excessive profit.

Conceived in the 1970s, it limited annual profit to 15 percent of capital investments, but from some 10 years ago, this was reduced to 10 percent.

We should look at this from the right perspective, as the investment in power systems normally take many decades to recoup, but in the 1970s, amid a weak economic climate in the early days of rapid development in Hong Kong, the



### Nuts and bolts

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government saw the need to encourage power companies to invest in new plants to meet increasing demand.

The tariffs also have a fuel clause adjustment mechanism.

Again, in the 1980s, when oil prices fluctuated, it didn't seem fair for either utilities or the consumer to bear the brunt of these increases on their own.

The fuel clause allows such fluctuations to be reflected in the monthly bills and paid fairly.

This, together with smart purchasing processes including buying fuel forward ahead of actual consumption and taking advantage of market demand fluctuations, helped to stabilize the effect of fuel costs to consumers.

Besides, the environment bureau has encouraged power companies to promote energy saving, both for affordability and environmental reasons.

For many years, both CLP Power and Hong Kong Electric have organized schemes to reward building owners who are willing to replace equipment for more energy efficient types, paying out subsidies of hundreds of million dollars.

When these schemes were first rolled out, consumers were most skeptical, as they have never seen commercial enterprises paying out money to reduce their sales.

But after a few years, everyone now accepts that we have a responsibility to help reduce energy consumption for the benefit of environmental protection.

It is one of the very few win-win situations that our government and the public utilities have been able to create.

**Veteran engineer Edmund Leung Kwong-ho casts an expert eye over Hong Kong's iconic infrastructure**