



Mr. Andrew Brandler,
Chief Executive Officer, CLP Holdings (AB)

An open dialogue with stakeholders enhances understanding of CLP's activities. We asked a fund manager, an investment analyst, a major customer and a leading environmentalist to put their questions to our Chief Executive Officer.

DL: In last year's annual report, you gave a detailed response to a number of options put forward regarding the post-2008 regulatory environment. These included open market competition, interconnection with Guangdong, a Consumer Price Index (CPI) minus X regime and a merger with Hongkong Electric. How have the events of the past 12 months changed the way in which you assess the merits/likelihood of these particular options?

AB: They have served to reinforce the views I expressed then. Let me briefly explain:

Guangdong is still short of electricity – during 2003, electricity sales to Guangdong represented 9.7% of our total sales from Hong Kong and have continued at high volumes at the start of 2004. In addition, the establishment of a robust, efficient and reliable transmission and distribution network in southern China to match the standards of service in place in Hong Kong is still a considerable time away.

There has been no change in the small percentage of CLP's tariff which represents costs related to local inflation – so a price cap formula along the lines of CPI minus X remains inappropriate.

I do not see any movement towards a merger of CLP and Hongkong Electric – whether on the part of the shareholders, whose approval would be necessary, or the Hong Kong Government which seems unlikely to consider consolidation of the electricity industry under a single supplier as being a favoured outcome to its review of the post-2008 regulatory framework.



Mr. David Y. T. Lui,
Vice Chairman, Schroder Investment Management (Hong Kong) Limited (DL)

Moreover, any of the above scenarios would constitute a radical change to the existing regulatory regime. Experience elsewhere in 2003 has reinforced awareness of the risk to long-term supply reliability that can result from this and the overwhelming importance that communities attach to maintaining a highly reliable electricity supply.

DL: CLP enjoys a sound reputation with its customer base for the provision of power services. How else could CLP extract value for shareholders from its customers?

AB: I do not presently see any clear opportunities to create meaningful value for our shareholders by using our customer base in Hong Kong for any purpose other than the supply of electricity. Our experience with our venture into telecommunications showed the practical limitations that arise when we try to leverage off our existing customer relationships to provide non-electricity services where market conditions are unfavourable. Our skills are as an electric utility. I do not believe that we have a sufficient competitive advantage to succeed in other businesses, particularly in the face of entrenched service providers.

We are, however, developing a wider view of the scope of the electricity service we can provide. Our efforts in expanding our energy services such as through fuel switching projects, energy efficiency audits, promotion of induction cooking technology and providing power quality solutions not only improve the value of our service to our customers, but also offer the possibility of future business development.

AH: What is your expectation of allowed return post-2008?

AB: Allowed return in a regulatory electric utility scheme is a complex issue, but the principle is simple: the level of allowed return must be adequate, in combination with the other regulatory provisions, to sustain adequate investment in the electricity infrastructure to meet the needs of the customers and their community. Looking back, the permitted return under the Scheme of Control (SoC) has remained between 13.5% and 15% since 1964 when the first SoC Agreement was reached between CLP and Government. Over the past 40 years, a stable regulatory regime with proper returns to investors has secured a durable and fair balance between the interests of those investors, our customers and other stakeholders. Investors have realised steady returns and growth over the years. Customers have enjoyed reliable service at affordable tariffs. The community has a world-class electric power infrastructure, and environmental performance has improved steadily and substantially, particularly during the most recent SoC period (since 1993).



Ms. Alice Hui,
Executive Director, UBS
Investment Research,
Head of Asian Utilities
Research (AH)

Because the electricity business is characterised by investment cycles measured in decades, rather than weeks or months as in the information technology industry, it is essential that returns be considered on a similarly long-term basis. During the period covered by the SoC, there have been very substantial swings in inflation and interest rates. For instance, as recently as the early 1990's, inflation had reached 12% with local interest rates at 9%. It is important that post-2008 return levels are not judged on a short-term basis. Instead, they should reflect the length of the period required to make a return on major capital investment in our industry and the commitment made by our shareholders to support such investment.

Finally, returns are just one element of a regulatory scheme – what counts for our customers is tariffs and quality of service. The existing SoC has delivered results in both these critical respects which match leading global standards. There is a clear message in this for those looking at the future shape of electricity regulation in Hong Kong.

AH: What is your expectation of the Development Fund arrangement post-2008?

AB: The Development Fund represents the accumulated differences between permitted return and the profit from the SoC operations. It does not belong to CLP and its shareholders. It represents a liability owing to our customers. In the 2003 SoC Interim Review, we have agreed with Government that during the 12 months prior to 1 October 2008, there will be specific discussions with regard to arrangements to deal with the balance in the Development Fund after the expiry of the SoC. The arrangements for the Development Fund will depend on the outcome of these discussions.

However, the Development Fund serves two very important purposes, namely financing capital expenditure and stabilising electricity tariffs. Whatever the shape of the post-2008 electricity regulatory regime, these objectives will remain valid. A mechanism such as, or similar to, the Development Fund would seem sensible and in the interests of all concerned.

KLL: There have been many high profile power interruptions in several countries in 2003 and the greatest area of concern is that many of these cities were also highly developed and had a mature electricity supply system in place. How is CLP planning to address these concerns given Hong Kong's reliance on a world-class electricity supply?



Mr. K. L. Lam, Building Services Manager, Hong Kong University of Science and Technology (a major institutional customer) (KLL)

AB: Communities, governments and electricity operators all over the world have been re-examining their electricity supply industries, in the light of the blackouts which occurred in 2003. There has been widespread comment on both the specific causes of these incidents and, of wider relevance, the underlying causes, such as lack of self-sufficient generation capacity, multiple system operators and increased reliance on power transfers through interconnections for which the various networks were not originally designed. All these factors are largely a consequence of changes in the power market structure in recent years.

All power systems are subject to the risk of breakdown, including our own. In CLP's case, we have been prudent in making investments in both generation facilities and the transmission and distribution networks, keeping pace with customer demand. Our generation, transmission and distribution systems are designed, constructed and operated in a coordinated manner to world-class standards. The power system in our supply area forms part of a vertically integrated business, with CLP being responsible for the operation of the entire system, from generation through to delivery to customers.

Multiple levels of safeguards have been incorporated into CLP's systems to prevent uncontrolled cascading outages. Emergency procedures are in place, including with respect to our interconnection with the Guangdong power grid. These procedures, which are regularly reviewed, are intended to deal with any potential outages at their emerging stage, in order to prevent them from developing into catastrophes.

We are aware of heightened concerns about supply reliability. Our actual performance in 2003 is described in the "CLP and our Customers" section of this Annual Report and some of the steps we are taking to manage these risks going forward are set out at page 72 of the Management's Discussion and Analysis.

KLL: CLP Power Hong Kong has been quite good in freezing its tariff for several years now and your annual customer rebates are also most welcomed and appreciated. I understand that your successful electricity sales to the Chinese mainland have helped CLP control costs and pass the savings on to Hong Kong consumers, but how much longer can we expect to enjoy them given that the Mainland is also developing its own electricity generation and distribution capabilities?

AB: CLP supplies power from Hong Kong to the Mainland in two ways – sales to Guangdong Guang-Dian Power Grid and to Shekou. Earnings from these China sales have totalled HK\$5 billion since 1992. The additional revenue has offset costs for our Hong Kong customers because 80% of those earnings are allocated to their benefit. The volume of such sales has varied significantly from year to year (see details in the Ten-year Summary on page 146 of this Annual Report).



I cannot predict how much longer sales to the Mainland will continue at the recent high volumes – this will depend on a number of circumstances beyond CLP's control, such as electricity demand growth in Guangdong, the introduction of new generating capacity and increased availability of power transmitted from the western provinces and the Three Gorges hydro-electric scheme. It would be unwise for us, in our business and tariff planning, to rely heavily on assumptions regarding continued China sales, in any event, for any period beyond, say 2005/06. On-going effective tariff management will be driven first and foremost by constant efforts to improve efficiency and control cost here in Hong Kong and to pass the benefits of these efforts through to customers.

PW: What is CLP's future plan on the fuel mix in operation to ensure environmental improvement? The current vogue is to use gas as that is the cleanest. However, that may not last forever, and there is a lot of coal around. Should there be money spent on developing a really clean coal technology?



Mr. Peter Wong,
Chairman of Hong Kong
Advisory Council on the
Environment (1996-2002)
(PW)

AB: In Hong Kong, we operate with a diversified fuel mix. We maintain a capacity mix of one-third nuclear, one-third gas and one-third coal. We intend to continue the diversity of our fuel portfolio, which supports supply reliability by avoiding over-reliance on a single fuel source and cushions our customers against unexpected price rises in any given fuel. The merits of this approach were indicated, for example, during the latter half of 2003 when a demand/supply imbalance for coal drove delivered prices to more than double their level of a year ago.

Viewed over the longer term, coal resources are plentiful and we envisage that it will continue to play an important role for the foreseeable future in electricity generation not only in Hong Kong, but elsewhere in the region, most notably, the Mainland and Australia. The major operational challenge lies, as you imply, in managing the environmental implications of burning coal.

There are two aspects to this:

- the emission of sulphur dioxide, nitrogen oxide and particulates – the combination of improved operating procedures, technical enhancement and careful coal selection has made it possible significantly to reduce the quantity of these emissions and thereby improve local air quality.

- the emission of carbon dioxide (or greenhouse gases) which is relevant to the wider issue of global warming – at present, there is no widely available and tested technology which produces a meaningful reduction in CO₂ emissions at anything approaching a reasonable economic cost. However, increasing concerns about global warming, coupled with an awareness that coal-fired generation will be here for the long term, is driving research forward in areas such as carbon sequestration. CLP has a good record in adopting new technology, such as in the introduction of the first combined-cycle gas turbines in Hong Kong. We are closely monitoring the progress of these developments. We will be keen to pursue CO₂ reduction technology when it becomes technically feasible and economically justifiable to do so.



PW: Why doesn't CLP have desulphurisation units in the current plants?

AB: The more modern coal-fired power stations in which CLP has invested, such as those at Ho-Ping (Taiwan), Anshun II (Guizhou province) and BLCP (Thailand) do have, or on commissioning will have, flue gas desulphurisation (FGD). Our older facilities, such as the plant at Castle Peak Power Station in Hong Kong, which was commissioned between 1982 and 1990, do not yet have FGD. Nevertheless, we actively manage our sulphur dioxide emissions from this plant, and have achieved significant improvement in our total sulphur dioxide emissions in Hong Kong through efficiency enhancement, coal quality control, and fuel diversification.

Given the advances in FGD technologies, and the continuing importance of coal as an energy resource, we have been giving serious consideration to retrofitting Castle Peak with FGD and thereby further lowering its emission of sulphur dioxide. Although a substantial capital investment would be required by Castle Peak's shareholders, our view is that introducing FGD would be technically, environmentally and operationally feasible. This is an issue which has already been raised by CLP with the Hong Kong Government. I look forward to progress on establishing the parameters for such a project, including the projected improved emissions targets and clarity on the future electricity regulatory regime in Hong Kong, which will be necessary to permit us to move ahead with this over the next few years.