

The Views of the Association of Engineering Professionals in Society (AES) on the Consultation Paper on Future Development of the Electricity Market in Hong Kong Stage II Public Consultation

Support Government Policy Objective

1. We support the existing Government policy objective of ensuring that the public can enjoy **reliable, safe and efficient energy supplies** at **reasonable price**, and to **minimise the environmental impact** caused by the production and use of energy.

The existing win-win-win situation

2. The existing Scheme of Control Agreements (SCAs) have been enabling the Government's policy objective to achieve to a very large extent, in term of outstanding supply reliability (up to 99.999%), and reasonable and affordable tariff (<2 % of average household expenditure). Both power companies have also successfully demonstrated environmental performance. Hong Kong enjoys a world-class electricity system. It is highly reliable, tailor-made to meet Hong Kong's high-rise needs and cheap by international standards.
3. Additional to its benefits to the public at large, the existing electricity supply arrangement does not require any revenue from the Government and the taxpayers. The two giant power companies are the major Hang Seng Index constituent stocks, providing stable and regular yield for pensioners, and reliable and steady capital appreciation for investors. It is a very successful case of Public Private Partnership, specifically the privatisation but not without Government monitoring and has long been creating a win-win-win situation for the citizens, the Government and the investors over the past decades. We support the current SCA-type of arrangement or similar bilateral agreements. Many of the arrangements under the existing Scheme of Control are worth retaining. Reform must not be introduced just for the sake of reform, and dismantle the existing ideal arrangements to the detriment of the public.

Government's key suggestions

4. Whilst most of the views as collected and presented in the Government's consultation document were supportive of the current SCA-type of arrangement, there were also some other views of concerns or suspected shortcomings of the existing SCA. They include:
 - (i) high tariff because of high rate of return;
 - (ii) over-investment due to return based on asset;
 - (iii) low flexibility because of too long a 15-year contract period;
 - (iv) lack of open competition;
 - (v) low transparency in deciding annual tariff; and
 - (vi) air pollution by the two companies as they use coal-fired generators.

These views appear to be mostly rather simplistic, superficial, speculative or sometimes ideological, and they should be treated with great care.

5. To address these concerns and suspected shortcomings, the Government has made the following key suggestions in the proposed regulatory framework.
- (i) lowering the permitted rates of return for the power companies from 13.5%-15% to 7%-11% for different types of assets, with an average between 9% and 10%, hoping to have a 10% to 20% tariff cut based on 2006 figures;
 - (ii) shortening the regulatory period from 15 years to 10 years to allow more flexibility;
 - (iii) helping to improve air quality by introducing new penalties and awards to encourage the power companies to meet emissions reduction requirements and use more renewable energy; and
 - (iv) preparing the ground for the future opening up of the electricity market and setting up of a separate regulatory authority.

Whilst we appreciate the Government's good intention to perfect the electricity supply market, we are concerned that these suggestions may create more problems, with the undesirable consequence of adversely affecting the reliability of the power supply system.

Rates of return

6. In view of the very long term payback period and long term fuel contracts, the huge investment and many uncertainties of the electricity supply industry, the permitted rate of return should not be set to too low a level, disincentivising long-term investment to the supply system.
7. The implicit comparison between the rate of return used in other countries and what should apply to Hong Kong is not very appropriate. A back-of-the-envelope adaptation of those overseas benchmarks with greater regard to the vertical integration and other nature of the local power supply companies suggests that the Government should provide for a much higher average rate of return than the average 9%-10% in the consultation paper, let alone the lowest bound of 7%.
8. Asset classification will further complicate the return issue, create bureaucracy, and increase administration burdens and costs. Proposing the lowest rate of return for emission reduction facilities contradicts the environmentalist's "user pays" principle.

Duration of the new agreement

9. The suggested duration of 10 years is too short, as it fails to recognise the long-term nature of the electricity industry, where fuel supply contract is normally over 20 years and assets last for 30 years or longer. This is not commensurate with investment risks and has no basis. The regulating period should remain 15 years as with the current SCAs.

Environmental Improvement

10. The Government's two proposals, of adopting the lowest return rate for environmental improvements on coal-fired units and imposing penalty on all assets against unilaterally and arbitrary set emission targets, are environmental disincentives and unreasonable investment risks.
11. We consider that there should be clear, long term and integrated energy and environmental policies with respect to the fuel mix, security of fuel supply, and role of coal and natural gas in Hong Kong. The Government needs to decide whether coal should be used as a long-term fuel for Hong Kong, or whether more gas generation is needed. Clear answers to these questions will appropriately lead to establishment of consistent environmental regulations which set emission targets with some reference to practicality of fuel mix and overall cost to the society. At the moment, emission targets are dealt with on an arbitrary basis, which is not in the best interest of the society.
12. Further lowering of the tariff is likely to encourage higher power consumption by members of the public and is against the promotion of environmental protection because it tends to increase emission. On this aspect, we would rather have the approach be set towards energy audits, and public promotion of energy conservation and savings in energy usage.
13. The Government's proposals for renewable energy (RE) development are not enough to encourage other parties to develop RE projects, except the two existing players or in conjunction with them. The differential returns set down for emission reduction and RE would skew the incentives of the power companies.

Open Market

14. There will be an increasing regulatory risk through unclear plans to migrate to a competitive market. It will not be easy for any of the new players to enter the market either in small-scale or large-scale manner, the latter of which requires interconnection with the existing players. On the other hand, they will not have any positive impact on consumers in the short-term and they are likely to complicate existing player's return on SCA and to "cherry-pick" the industrial customers or easily accessible customers.
15. As engineers, we are worried about disorder in the market, with new players being allowed to enter without any clear plan of how this will affect the supply system, and the customers. We are against the introduction of new players at the present immature stage, when the Government has not drawn up or even has not started to draft any rules for it.
16. If Hong Kong decides to have transition to an open market for electricity supply market (note this decision has not been reached yet), then principles suitable to Hong Kong conditions should be established in consultation with a wide range of stakeholders and sectors of the society.

Some other aspects

17. Share prices of the two existing power companies are very sensitive to the regulatory rate of return and the new regulatory model. They are of paramount importance to the Hong Kong's stock market investors and Hong Kong's economy.
18. Both existing power supply companies have thousands of employees and are leading players in world standards. Their success is Hong Kong's pride. If we open up the market relying mainly on electricity supplied from China Mainland, their downturn will adversely affect our economy and the employment market. The Government has a duty to ensure that the new regulatory arrangement will not undermine these Hong Kong enterprises, being detrimental to the very established power industry in Hong Kong and affecting several thousands of employees' employment.
19. Whilst we should not be jealous of the two existing power companies for their recently announced huge profit, the companies should also recognise that they owe to their long time customers, the Hong Kong people. They should undertake more of their corporate social responsibility initiatives to pay back the society in a number of ways, such as self-initiated tariff cut, public education on energy sustainability, research and development on RE, etc.

Conclusions

20. In summary, we do not agree with many of the Government proposals because they could jeopardize the long-term reliability of our electricity supply system, which is vital to our economy, safety etc. The present regulatory model has been working very well – we in Hong Kong have an electricity system that is the envy of the developed world. We should not lose sight of it.
21. The cuts in return and duration, unclear plans for a future competitive market, and environmental proposals result in large increases in risk to the power companies. This will inevitably discourage investment and compromise reliability which is of paramount importance to Hong Kong as a whole. The Government needs to revise its proposals to ensure sustained excellence in the electricity supply system