

## **Study Brief**

# **STUDY OF INTERCONNECTION AND COMPETITION IN THE ELECTRICITY SUPPLY SECTOR IN HONG KONG**

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## **INTRODUCTION**

Hong Kong's electricity is supplied by the private sector. Entry to the market is unrestricted. Two companies, the China Light and Power Company Limited (CLP), and the Hongkong Electric Company Limited (HEC), have invested in electricity generation, transmission and distribution in Hong Kong. The companies are the sole suppliers of electricity in the areas that they serve. This situation is the product of market forces.

2. Scheme of Control Agreements between the companies and the Hong Kong Government (the Government) regulate the companies' rate of return from electricity-related activities and allow government monitoring of financial and technical performance. The companies have no exclusive rights to supply electricity: the Scheme of Control Agreements are not franchises, nor do they define a supply area for either company or exclude new entrants to the market.

3. The Government is committed to the promotion of fair trade and competition as the best guarantee of economic efficiency, low prices and consumer protection. In the light of this commitment and public sentiment that competition in the electricity supply market should bring about lower tariffs and possibly assist in deferring installation of new capacity, the Government has decided that a study should be conducted of the feasibility and potential costs and benefits to consumers of increasing the interconnection between Hong Kong's two electricity supply companies and encouraging competition in the electricity supply sector.

## **OBJECTIVE**

4. The objective of the study is to establish whether additional interconnection between Hong Kong's two electricity supply companies and encouragement of competition in the electricity supply sector would be in the interests of consumers. The Consultants will be required to provide independent findings and recommendations sufficient to enable the Government to formulate a substantive response to public concern on these issues.

## **SCOPE OF WORK**

### **Task 1: Assessment of the potential costs, benefits and other implications of increasing interconnection capacity between CLP and HEC**

5. The Consultants shall assess and report on
  - (a) for the periods to 2008, 2018 and 2028, respectively, the potential costs and benefits to consumers, and the consequent tariff implications, of increasing the capacity of the interconnection between CLP and HEC so as to allow greater scope and opportunity for transfer of power between the two companies in the interests of competition and efficient use of the available generating capacity;
  - (b) the technical constraints and corresponding solutions involved in increasing interconnection capacity to any extent considered desirable in the light of potential benefits to consumers; and
  - (c) the co-operative arrangements between CLP and HEC needed to realise any potential benefits to consumers from any increase in interconnection capacity and the implications for the Scheme of Control Agreements between the companies and the Government.
6. Without limiting the scope of the task, Task 1 shall include an examination of the feasibility and desirability of CLP and HEC allowing access to each other's supply network for the purpose of supplying all consumers or certain categories of consumers in each other's service area on a competitive basis.

### **Task 2: Assessment of the potential for competition in the electricity supply sector, evaluation of alternative market structures and identification of the optimal market structure**

7. Taking into account any relevant findings from Task 1, the Consultants shall assess and report on -
  - (a) the potential for promoting competition between CLP, HEC and any other companies which might wish to supply electricity to all consumers or certain categories of consumers anywhere in Hong Kong from sources within or outside Hong Kong;
  - (b) the role of interconnection capacity between existing supply areas in promoting such competition;
  - (c) the alternative and optimal market structures for promoting such competition;

- (d) for the periods to 2008, 2018 and 2028, respectively, the potential costs and benefits to consumers, and the consequent tariff implications, of such competition under the different market structures;
- (e) the regulatory arrangements to be associated with such competition under the different market structures, including (but not limited to) those for -
  - assessing future demand for electricity
  - assessing the optimal means of meeting demand, including supply and demand side options
  - assessing technical proposals
  - deciding which supplier(s) should have new generating capacity
  - protecting the interests of consumers as regards tariffs
  - monitoring of company performance
- (f) the implications for the Scheme of Control Agreements between the companies and the Government.

8. Without limiting the scope of the task, Task 2 shall include an examination of the feasibility and desirability of market structures in which access to the electricity transmission and distribution network in Hong Kong is open to all companies wishing to supply electricity to consumers and is managed and operated by -

- (a) a company not involved in generating electricity;
- (b) the existing owners of the network;

taking into account the need to be equitable to existing owners.