

Enclosure

Legislative Council
Bills Committee on District Cooling Services Bill

Views from the Hong Kong Institution of Engineers on
District Cooling Services Bill

The Hong Kong Institution of Engineers (HKIE) would like to express our support for the introduction of District Cooling Services (DCS) Bill. It is believed that the Bill will set the legal foundation for sustainable and competitive operation of the district cooling system.

2. The HKIE believes that the principle behind the Bill, which sets to recover both the capital and revenue costs of the district cooling from users of the system, is sound and should be supported.

3. However, to alleviate the concern of private undertakings on the quality, reliability and availability of district cooling, the HKIE suggests in the Bill with provision to monitor and set the minimum acceptable quality, reliability and availability standard of DCS to its clients. Should the actual performance not be met, a rebate to the users as a fraction of the capacity charge may be considered. On the other hand, if the technical performance standard, especially the figure of reliability, is found better than the stand-alone system, this will give confidence to the private undertakings to accept the adoption of DCS, which will in turn make it more cost effective in operating the DCS.

4. In the Bill, the HKIE views that the principle to incorporate "*rate of change of CCPI*" and "*rate of change in electricity tariff*" in the determination of future "*capacity charge rate*" and "*consumption charge rate*" is a reasonable approach and should be supported. However, it is suggested to have a list of relevant figures for comparison purpose to justify the proposed setting of the "*capacity charge rate*" at \$112.11 per kW_r and also the "*consumption charge rate*" at \$0.19/kW_{rh} as stated in Schedule 2 of the Bill.

5. Also, it is noted that in the Bill there is a provision for the "*capacity overrun charge*" set by reference to the contract and actual cooling capacity. It is suggested that the Bill could also address the situation when the actual cooling capacity is below the contract cooling capacity and allow the charging mechanism with incentives for such situation, so as to encourage more concerned clients to apply for use of DCS.

6. Moreover, in order to encourage innovation and improvement in the operation of the DCS in its tens of years of operation, the HKIE suggests including an improvement factor in the price setting formula in *Schedule 2* of the Bill. It is suggested that the proposed improvement factor can be determined by the Director of EMSD having consulted with stakeholders and professional bodies to reflect the technological and managerial advancement in future that may lead to higher efficiency and lower cost of producing cooling water. This initiative will also ensure

the DCS pricing be kept competitive against stand-alone cooling systems, as when the DCS may become more and more efficient over time. This will also provide an incentive for future operator of the System to bargain for better use of electricity tariff structure and introduce new business element (e.g. selling of by-product hot water), and for early introduction of effective asset management to reduce running cost and capital refurbishment/ improvement costs.

7. Furthermore, it is suggested to consider setting the statutory limit on the accuracy of meter used to measure the actual cooling capacity and actual cooling energy consumption of the building, similar to that of electricity meter and water meter as in other ordinances.