Government to further reduce emissions from power plants

The Government published today (May 7) in the Gazette the Ninth Technical Memorandum for Allocation of Emission Allowances in Respect of Specified Licences (the Ninth Technical Memorandum), which aims to further reduce the emissions of air pollutants from power plants from 2026 onwards. This will help to improve air quality in both Hong Kong and the Pearl River Delta (PRD) region.

The new technical memorandum (TM), which was issued under the Air Pollution Control Ordinance (APCO), tightens the annual emission caps of sulphur dioxide (SO2), nitrogen oxides (NOx) and respirable suspended particulates (RSPs) from the electricity sector from 2026 onwards at 2 852 tonnes, 11 144 tonnes and 367 tonnes respectively. As compared with the emission allowances for 2024 set under the Eighth TM, the proposed Ninth TM will further tighten the emissions of SO2, NOx and RSPs by 9 per cent, 10 per cent and 6 per cent respectively for the electricity sector.

A spokesperson for the Environmental Protection Department (EPD) said, "In setting the new emission caps, we have taken into account factors including the progress of the construction of new gas-fired units by the two power companies for replacement of coal-fired units scheduled to retire in the coming years. We have also factored in the emission performance of existing generating units, the estimated import of electricity from the Daya Bay Nuclear Power Station (DBNPS), the projected local electricity consumption and the projected electricity intake from renewable energy (RE) sources, etc."

The Hongkong Electric Company, Limited (HEC) forecasts a drop of about 1.4 per cent in electricity demand in 2026-2027 as compared to 2024-2025. The forecast has already taken into consideration the energy efficiency and conservation measures in the Energy Saving Plan for Hong Kong's Built Environment 2015~2025+ and the Scheme of Control Agreements. The decrease in electricity generation will reduce air pollutant emissions correspondingly, thus allowing room for further reduction of HEC's emission allowances.

Having considered the electricity demand of new developments, CLP Power Hong Kong Limited (CLP) forecasts a slight increase of about 0.5 per cent in electricity demand in 2026-2027 as compared to 2024-2025. However, as the projected electricity import from the DBNPS is expected to gradually resume as normal after the completion of the periodic safety review in 2024, CLP anticipates a reduction of about 6 per cent in local electricity generation, resulting in reduced air pollutant emissions.

"As emissions from the electricity sector accounted for 47 per cent, 28 per cent and 16 per cent of the territory-wide emissions of SO2, NOx and RSPs respectively in 2018, the tightened emission allowances for power plants will

help improve the air quality in Hong Kong and the PRD region," the spokesperson said.

"For any new electricity works, we will allocate emission allowances based on the emission performance of a new gas-fired generating unit adopting the latest technology for emission reduction. The Ninth TM will continue to retain the mechanism in the Eighth TM to cater for the intake of RE and other clean energy. The EPD will review the TM again not later than 2023 to enable timely revision of the emission allowances."

The new TM will be tabled at the Legislative Council on May 12 for commencement by the end of 2021. In accordance with the APCO, the new set of emission allowances will come into effect on January 1, 2026.