Technical Visit to Lamma Power Station

Reporter: CHUI Hon Lam Winson

Lamma Power Station is a coal and gas-fired power station located on Lamma Island. Being the second largest coal-fired power station in Hong Kong, it supplies electricity to more than 570,000 customers on Hong Kong Island and Lamma Island, with reliability of more than 99.999%. The station has a total installed capacity of 3,737MW.

On 6th May, 2017, a technical visit to Lamma Power Station was held by HKIE Young Members Committee. The site visit started by a ferry ride to the station at 09:30am with a safety briefing.

Upon arrival, we first proceeded to Visitor Centre by bus. An introduction to Hong Kong Electric and its transmission network was given, followed by a detailed explanation on the layout, elements and operation of the power station. More information on the environmental protection measures was explained, such as the installation of Electrostatic Precipitators and use of coal ash for landfill purposes or making cement and brick.

Our second stop was one of the Solar Panel Deploy. Over 8,000 numbers of amorphous silicon thin film photovoltaic (TFPV) panels have been installed with total capacity of 1MW with anticipated annual output of 1,100,000kWh. They are set to face south and inclined at 22 degrees for maximised power output.

The third stop was the Main Station Building Unit 9 with gas turbines. The heat recovery steam generator of the unit was introduced. The unit recovers heat from a hot gas stream producing steam to drive a steam turbine. We then visited the gas turbine hall where gas turbine, steam turbine and generator were installed to generate 350MW. An overlook was then held to the gas receiving station which received natural gas for pressure regulation.

The above explanations were given by Ir Edmund Pang who accompanied us during the tour, with many interactive questions and answers alongside. On behalf of HKIE-YMC, we would like to express our most sincere thanks to Ir Pang for his host and delivery of inspiring and informative visit.

(328 words)

Photo caption:

Group photo taken in front of solar panel



Photo – Group photo of the site visit