Technical Visit to CLP Daya Bay Nuclear Power Site

Activity Report by Danny Leung

Technical Visit to CLP Daya Bay Nuclear Power Site was organized by the Young Professional Network of Energy Institute (Hong Kong Branch) "YPN EIHK" and CLP Power Hong Kong Limited on 1 June 2019 with the aim to providing an opportunity for Engineers to understand the application of nuclear power for electricity generation for Hong Kong and the mainland, and its important role in the daily lives of Hong Kong people to reduce carbon intensity in the process of power generation. 40 delegates joined this event and were taken comfortably and safety to the site in Daya Bay by a coach provided by CLP.





Photo 1 & 2 - Group Photo

On our way to the Daya Bay Nuclear Power Site, the Tour Guide - JoJo dispatched booklets, namely "Understanding Nuclear Power" published by Hong Kong Nuclear Investment Company Limited, and briefly introduced the site. And then, Ir Paul Kwong – Past EIHK Chairman shared a basic knowledge about the working principle of electricity generation and the status of electricity generation in Hong Kong.

On our arrival, the delegation was greeted warmly by Jimmy – Nuclear Plant Operator (see Photo 3). He presented us with a video clip and powerpoint detailing the nuclear power generation in a pressurized water reactor, radiation and health, and most important - and Nuclear Safety of Daya Bay Nuclear Power Station expressed in terms of site selection, plant design and operational safety, governance and regulations, radiation protection and environmental monitoring, emergency preparedness, communication mechanism in emergency situations, and nuclear waste management.



Photo 3 - Nuclear Power Operator - Jimmy presented us with a video clip and powerpoint

In the second session, the delegation was taken to an auditorium where it provided aerial view of the training room built exactly the same as the nuclear plant control centre. Jimmy highlighted the stringent training and qualifications of operators that the site placed great emphasis on. We were given to understand that all operators were required to uphold the extraordinarily high professional standards with continual training.

Before taking the scenic sights of the whole nuclear power site (see photo 4), all visitors were led to the display gallery where it displayed a 3D model showing the whole territory of Daya Bay Nuclear Power Site (Photo 5 & 6), a full scale model of a fuel assembly, and a 1:10 scale model of Nuclear Reactors illustrating the sectional view of containment building, fuel cladding and reactor pressure vessel.



Photo 4 – Scenic sight of the whole nuclear power site

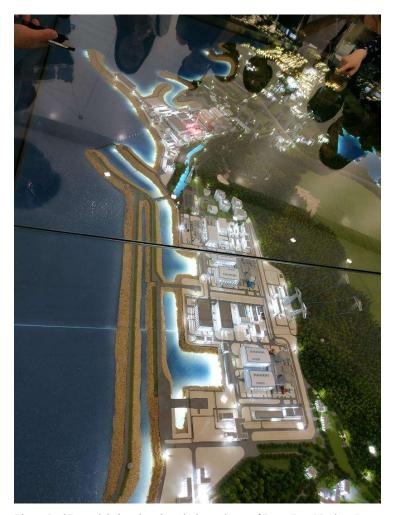


Photo 5 - 3D model showing the whole territory of Daya Bay Nuclear Power Site

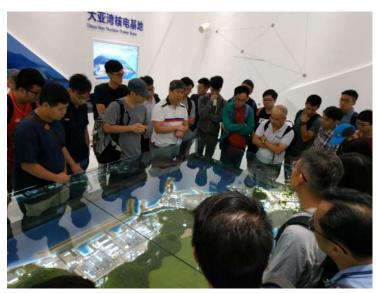


Photo 6 - 3D model showing the whole territory of Daya Bay Nuclear Power Site

On our way back to the dismissal point after the lunch break, Ir Danny Leung — Chairman of YPN provided an updated on: 1) academic requirements for Chartered Engineers Registration; and 2) Recently Implementation of Competence-based Professional Assessment for Corporate Membership by Hong Kong Institution of Engineers.

Thanks to CLP Power Hong Kong Limited for organizing such an enjoyable and informative visit for us.