

## Exclusive Technical Visit to Kuala Langat Power Plant and R&D Facilities by Senior Management of Genting Sanyen Power Sdn. Bhd. and IEM-METD Committee Members

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On 19 December 2006, Committee Members from the Mechanical Engineering Technical Division (METD) of the Institution of Engineers, Malaysia were invited by Genting Sanyen Power Sdn Bhd (GSP) for a technical visit to their Kuala Langat Power Plant (KLPP) together with engineers from Chunghwa Picture Tubes Ltd. (CPTM). Eleven committee members led by the Chairman Engr. Luk Chau Beng from METD and 5 engineers from CPTM led by its Director of Plant Engineering Division, Engr. Bryan Tan.

GSP is one of the independent power producers that come on board supplying electricity to national power utility since 1994 with government's moves to privatise the generating companies in Malaysia. Genting Sanyen Power owns and operates a 762 MW natural gas, combined cycle cogeneration plant in Kuala Langat, Selangor. The power plant was built within the confines of the existing

Genting Sanyen Industrial Complex in Kuala Langat, 70 km south of Kuala Lumpur. The Plant consists of three units of Alstom GT13E2 gas turbines, two unit of GE Frame 5 gas turbines, four units of Heat Recovery Steam Generators, and one steam turbine. Besides supplying electricity to national grid, the Plant supplies process steam to whole Genting Sanyen Industrial Complex, including paper-making factories and packaging plant.

With the experiences developed over the past eleven years of operation, GSP has established a series of energy efficiency and optimisation programs. Its continuous improvement and optimisation initiatives on its cogeneration processes had made the Plant one of the most efficient power plants in Malaysia, with operating efficiency of over 50%. In 2005, KLPP was recognised as the most efficient and most capital productive combined cycle power plant in Malaysia (in comparison with other IPPs in

Malaysia), according to the benchmarking survey conducted by National Productivity Corporation.

To reap the fruits from this technical visit, GSP home hosts, headed by Engr. Dr Philip Tan, the Technical Director of GSP prepared a series of knowledge and experience sharing session with METD and CPTM. Topics covered in the sharing session included:

- The conservation of energy processes, various in-placed energy optimisation processes,
- Online monitoring for both top management and operational section,
- The implementation of co-generation of heat and electricity,
- Application of adsorption chiller for air-conditioning,
- Waste to energy generation
- Water recycling program, and
- Other topics raised by both groups.

This meeting and visit lasted from 10:00 a.m. to 1:00 p.m. and it has furnished a platform for the industrial sectors to contribute idea and share information in energy conservation and savings. The forum ended with lunch hosted by Genting Sanyen Power at the famous Loon Sing Restaurant.

The METD members found the visit and the technical presentations provided by GSP most informative. In the near future, METD would be inviting GSP to give talks at the IEM in their specialised topics that would be of interests to engineers working in industries where energy usage form a significant cost to their production. ■

