

Wärtsilä power for Cambodian IPP

The Cambodian IPP investor Khmer Electrical Power Co Ltd ("KEP") has awarded a contract to a consortium led by Wärtsilä Corporation to supply a 30 MWe diesel power plant in Phnom Penh, Cambodia.

The plant will consist of four Wärtsilä 18V32 diesel generating sets. The plant will be of a fairly conventional design with the engines operating in baseload, burning heavy fuel oil. The plant will be operational in March 2005 and will supply electricity to the Cambodian national grid under a contract with Electricité du Cambodge (EDC), the Cambodian national power utility.

Khmer Electrical Power Co Ltd is the first Cambodian owned independent power producer (IPP) in Cambodia. KEP is the recently formed power subsidiary under Oknha Phu Kok An's business conglomerate, and the company plans to extend its power plant business in Cambodia in the future.

Wärtsilä is joined in the consortium by Comin Asia Pte Ltd of Singapore for regional supplies and Wärtsilä's Cambodian agent Comin Khmère Co. Ltd for local works.

Wärtsilä already has experience of supplying diesel power plants in Cambodia. One of the existing installations is an 18.6 MW power plant consisting of three Wärtsilä 18V32 generating sets. This power plant has been supplying electricity to EDC since 1996. The other power plant is a



5 MW EDC-owned power plant in Sihanoukville consisting of two Wärtsilä Vasa 8L32 generating sets and in operation since 1998. Both plants run on HFO. EDC is satisfied with the performance of both plants. Spare parts and services for these plants are supported by Wärtsilä Singapore. ■

Two power plant extensions for screen factory in Taiwan

In a move to increase power supply to their Lungtan factory in Taiwan, Chunghwa Picture Tubes Ltd (CPT) has awarded two contracts to Wärtsilä for two turnkey power plant extensions. The new power plant extensions will supply the increase in power needed by CPT's new production facilities.

CPT awarded the first contract for a 12 MWe standby power plant extension, featuring four Wärtsilä 18V200 engines, in January 2004 (Extension 1). The second CPT contract, signed in May 2004, is for a 52.76 MWe baseload power plant extension with seven Wärtsilä 18V32 engines and ancillary equipment (Extension 2).



CPT – Chunghwa Picture Tubes, Ltd. – is a public listed company with factories in Taiwan, China and Malaysia. Its core business is the manufacturing of thin film transistor liquid crystal displays (TFT-LCD), plasma display panels (PDP), colour display tubes (CRT) and LCD projectors.

A reliable and secure power supply is critical to CPT's business and their TFT-LCD production lines. A single power outage could cause catastrophic damage and cost CPT massive financial losses.

The electricity generated is for CPT's internal use and represents about 50% of the power demand of the Lungtan factory. The remaining power is supplied by the local grid. Extension 2 is in parallel with the grid.

Extension 1 and the previously installed four Wärtsilä 18V200 generating sets will be started up in the event of a grid power outage. Extension 1 will be in parallel with Extension 2.

The ability to meet fast-track delivery schedules played an important role in the award of these two contracts. The first project was taken into operation in October 2004 and the second will be operational by January 2005.

The national Taiwanese emission limits for diesel engine power plants are 235 ppm-v (dry, 13 %-vol O₂) for nitrogen oxides (NO_x) and 500 ppm-v (dry, 6 %-vol O₂) for sulphur dioxide (SO₂).

The Extension 2 project (52.76 MWe power plant) has to fulfil much stricter requirements than required by national legislation: NO_x 80 ppm-v (13 %-vol O₂) (about one-third) and SO₂ 40 ppm-v (dry, 6 %-vol O₂) (about one-twelfth). The power plant will therefore be equipped with efficient SCR (Selective Catalytic Reduction) units for NO_x and a Flue Gas Desulphurization (FGD) system for SO₂ reduction.

With four industrial baseload power plants built since 1995, the working relationship between Wärtsilä and Chunghwa Picture Tubes Ltd has established a good reputation for Wärtsilä's products and personnel in the region. It is this ability to work well together that has led to these latest contracts. ■