Converting Hachinohe Thermal Power Station Unit 5 to combined-cycle system

Tohoku Electric Power is determined to convert Hachinohe Thermal Power Station Unit 5 (located in Hachinohe city, Aomori Prefecture with an output of 274MW) to combined-cycle system for reducing the effect on the environment. The Unit 5 has been constructed as an emergency power supply for next summer, because The Great East Japan Earthquake caused heavy damage to our Thermal Power Stations located on the Pacific coast.

The Unit 5 will commence operation in July 2012 as originally planned. Firstly, we will adopt simple-cycle system which consists of gas-turbine and generator to secure early power supply. And then, we plan to add heat recovery steam generator, steam turbine and generator to convert the unit 5 to combined-cycle system generation with high efficiency. That will be a permanent power supply (with an output of approx. 420MW) which reduce the effect on the environment.

(Summary of the converting plan)
- Location; Uheiekawara 1-1, Kawaragi, Hachinohe City, Aomori Prefecture
- Generation system; Combined-cycle system
- Output; 420 MW
- Fuel; Light oil, Gas
- Efficiency; Approx. 55%
- Schedule
  - Jun. 2012; Start of construction
  - Mar. 2014; Start of test operation
  - Aug. 2014; Start of full operation

(Summary of the original plan)
- Generation system; Simple-cycle system
- Output; 274 MW
- Fuel; Light oil
- Efficiency; Approx. 33%
- Start of operation; Jul. 2012
Tohoku Region
(Tohoku EPCO service area)

Location of Hachinohe Thermal Power Station

Location of installing Combined-cycle system [Yellow line]

Location of installing Simple-cycle system [Red dotted line]