



BARKING COMBINED-CYCLE GENERATION PLANT

London, United Kingdom

Capacity

- 1,000 megawatts

Equipment

- Five 130-megawatt GE Frame 9171E gas turbines
- Two steam turbines rated at 140 megawatts and 210 megawatts

Highlights

- 15-year gas supply agreement with British Gas plc (now Centrica plc)
- 15-year electricity sales agreements with two Regional Electricity Companies (RECs): EDF Energy and SSE Energy Supply Limited

Commissioned

- 1995

Ownership

- Thames Power – 51%
- SSE Energy Supply Limited – 30.4%
- EDF Energy – 18.6%

The 1,000-megawatt Barking Power Plant in east London is a unique venture for many reasons. It was the first independent power project in southeast England and the first large generating station to be built in Greater London in more than 30 years. The plant uses an advanced combined-cycle technology that enhances fuel efficiency and reduces emissions.

Thames Power Limited, the project developer, was established in 1988 by BICC plc, now Balfour Beatty plc, an international engineering and cable manufacturer. ATCO Power joined Thames Power as operating partner in 1989.

ATCO Power seconded a number of senior executives to lead Thames Power's efforts to secure necessary site agreements, financial arrangements and the turnkey construction contract. Under supervision by ATCO Power, in its role as the owners' engineer, construction was completed on time and significantly under budget.

ATCO Power holds a 50% stake in Thames Power, which in turn owns 51% of the Barking project. More than 70% of the plant's output is sold directly to two Regional Electricity Companies (RECs) – EDF Energy and SSE Energy Supply Limited. The balance of the plant's output is now traded on a merchant basis. Affiliates of the two REC's hold the remaining 49% ownership interest in the plant.

Thames Power Services, supported by ATCO Power, is responsible for all operations, maintenance and business activities of Barking Power. Commercial operations began in mid-1995 and since that time the plant has performed well.

With low NOx emissions, the plant has one of the best environmental records in Europe for a gas-fired power plant.

The Barking project provided an opportunity for ATCO Power to demonstrate its credentials in working with partners, customers and suppliers to bring a project through a broad range of complex technical, regulatory and organizational challenges.



ATCO Power

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