# Spalding Energy Expansion Project, the UK

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InterGen's Spalding Energy Expansion Project in the English county of Lincolnshire, reached financial close on 27 February (2018). The sponsors raised a total of £72 million in debt for the project.

The project involves expanding the existing 645MW CCGT gas-fired power facility with the addition of a 300MW open-cycle gas turbine unit on an adjacent plot of land. The Department of Energy and Climate Change granted Section 36 planning consent for the project in November 2010 and a revised consent in October 2015.

Expected to generate enough energy to power one million households by June 2019, the Spalding expansion project was also the first large-scale, new-build thermal project to secure project financing under the UK capacity market rules.

**UK Electricity Market Reform and the 2016 T4 auction**

Part of the UK government's 2010 electricity market reform – aimed at delivering low-carbon energy and reliable supplies, while minimising end-user costs – the capacity market (CM) was introduced to ensure security of electricity supply at peak times by offering an additional revenue stream to sources.

CM reduces exposure to volatile electricity prices as a lone source of income resulting in placated lenders and increased revenue on a project level. On a national level the package can tackle the intermittency and inflexible low carbon generation sources.

The T-4 capacity market auction in 2016 was launched to guarantee power delivery in 2020-2021. Over 3.4GW of new-build generating CMUs won capacity agreements – including InterGen's Spalding expansion. It was the only large-scale OCGT to have secured such an agreement.

It cleared at £22.50/kW for 15 years, which was significantly higher than the previous two actions – £19.40/kW in 2014 and £18.00/kW in 2013.

The most recent auction (2018) cleared at £8.40/kW.

Guaranteed revenue signals an ability to pay back loans thus attracting the attention of banks who would otherwise be adverse to merchant risk.

**The financing**

The Spalding expansion financing closed on 27 February 2018 with banks NordLB and Santander providing limited recourse financing. InterGen mandated the two banks to lend on the £72 million loan on 14 November 2017.

The £100 million debt package breaks down as:

- £52 million – term loan for capacity market over a 15-year tenor

- £12 million – term loan over 15 years
- £4 million – debt service reserve facility
- £2 million – working capital
- £2 million – liquidity facility

The debt priced over Libor at low-to-mid 200s.

**Parties involved**

The sponsor advisory team includes:

- Consilium Advisory – financial
- Herbert Smith Freehills – legal
- Poyry – establishing trading profile

The lender advisory team includes:

- Linklaters – legal
- WSP – technical
- Operis – model audit
- Indecs – insurance adviser

Other parties involved:

- Siemens – F-class gas turbine supplier
- Atlantic Projects- construction
- Darke Engineering – gas infrastructure

**Peaking plants vs batteries**

Investments in gas-fired peaker plants continue as the problem of intermittency for renewables persists. But lenders backing traditional technologies are also supporting nascent solutions which one day may replace the peakers.

In January 2018, Santander announced a £28.5 million investment in London-based Battery Energy Storage Solutions (BESS) which plans to build and operate 100MW of grid-scale battery storage by the end of the year.

NordLB financed the Lakeland project in northern Queensland in 2016, which featured a 5.3MWh battery storage system.

OCGT remains one of the more competitive technologies for managing the peaks and troughs in energy demand, but as battery continues to draw interest and attract more investment, how long until OCGT loses its charm with investors and lenders? The UK government has previously supported gas turbine technology through ROCs and CM auctions but no good thing lasts forever.

OCGT technology may become more dependent on mid-term offtake agreements and larger equity buffers to reduce merchant risk to draw lender interest.