

# All fired up

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‘From time to time banks take a look at their power portfolio and shut their doors to merchant risk,’ says Gerritt Ewing, director of project finance at Entergy in London, ‘but they come back.’ But why would banks turn away from UK power in the first place? Is this a case of an overheated market?

In this instance you have to know the history. In the past 10 years the UK power sector has been on a roller coaster journey. The break up of state monopolies and introduction of competition has paved the way for a succession of independent power projects. During that time competition for power concessions has hotted up as has the battle by lenders to win what are perceived as safe deals in a safe market.

In 1990 the UK electricity industry was divided into generation, transmission, supply and distribution. In the same year the UK's first independent power project, Lakeland, reached financial close followed shortly afterwards by Corby and Peterborough. These deals followed a US template established in the 1980s and so had a fixed-price turnkey construction contract, operation and maintenance contracts, long-term gas supply agreements and long-term contract for differences (CFDs).

By 1994 the situation changed again with power offtakers unwilling to bare the full CFD by themselves and demanding that sponsors should accept up to 75% of that risk. Humber power project was the first where equity providers, rather than the regional electricity companies, agreed to take a long-term view of electricity prices. This type of deal was quickly followed by First Hydro, the first independent power project to be financed in the capital markets. While the Rocksavage and Humber projects introduced gas tolling arrangements whereby the gas toller pays the project company a capacity payment to have the plant available for generation. If electricity prices are higher than gas prices there is an incentive for the plant to operate. If the electricity prices are lower than the toller's gas prices the station will not be used unless the operator enters into a separate agreement to purchase gas at spot prices.

And it is this absence of long-term contracts, where sponsors either purchase gas in the spot grid or sell power into the spot grid, which defines ‘merchant risk’. Deals such as Enron's Sutton Bridge – financed in the capital markets with a sterling eurobond and a Rule 144A bond – AES Barry and Entergy's SaltEnd plant, led the way for UK merchant power deals.

With the exception of First Hydro and Sutton Bridge, all of the UK independent power projects financed since 1990 have been financed by banks. And while there are plans to refinance Entergy's Dam Head Creek deal in the capital markets, sponsors have generally tended to favour bank deals in the UK – contrast this with the level of bond financings in the US power market. The high level of liquidity in the bank market and the high execution risk of issuing a bond coupled with poor market conditions have acted as a deterrent for sponsors tapping the UK capital markets for their power projects.

Bank financing is the order of the day. And as these deals have progressed the financing has become increasingly aggressive. The 1997 AES Barry transaction, in particular, was viewed by market observers when it signed as being very tightly priced. Viewed now Barry seems reasonable. Subsequent deals – and there has been a glut of them in the past six

months ? have been hotly contested. But there are some dangers.

With several deals in the syndication market at the same time, the feeling is that one deal will loose out in syndication and that appetite for such transactions will wane. Recent deals include Dam Head Creek and Coryton and still to close syndication, are Great Yarmouth, Shoreham, Barry refinancing and Fifoot.

Says Entergy's Ewing: ?The market for merchant risk has tightened up considerably. Now banks are pulling a shade down on their merchant lending business and seeing how the ones they have financed will do after construction.?

### **Have we gone too far?**

But if some fear syndication risk based on an overcapacity of deals in the market, others believe that there has not been enough analysis of the risks involved in merchant deals. Michael Wilkins, director in the infrastructure finance department at rating agency Standard & Poor's in London casts doubt on the methodology used for recent merchant deals. Says Wilkins: ?There have been a lot of merchant deals in the market recently and most of them have been done in the bank market on very aggressive terms which is very surprising given the level of risk. There seems to be a low level of protection on a number of these deals.?

Wilkins outlines a series of risks, which he believes have not been worked sufficiently into recent deals. Says Wilkins: ? The problem is that the bank market has been very liquid for this kind of asset in recent months. But there are a lot of extra risks. There is considerable uncertainty over where the pool prices will go and consequently where merchant receipts will go. A lot of merchant power plants are heavily exposed to these dangers. They are relying on efficiencies in technology and the low cost of fuel. But technology improves very quickly and so their relative position in the pool can also change substantially. ? But Wilkins points to a more fundamental problem ? the cost of fuel and the price paid for power.

### **The gas moratorium and new trading arrangements ? the next twists in the tale**

But a highly competitive bank market is only part of the story. Uncertainty from the UK government has also cast doubt over the future of UK gas-fired independent power plants. Faced with a backlash from the UK coal industry at the end of 1997, the UK government imposed a moratorium on the granting of section 36 approval for new gas fired power plants. While there have been a trickle of deals which have managed to leapfrog this moratorium ? most controversially the 500MW Baglan Bay project near Port Talbot in Wales ? project sponsors and lenders are sceptical about when, if ever, the government will lift the moratorium. Part of reason why banks have been keen to grab the power deals in the past few months is because they are unsure when the next ones will come to market and, with several deals awarded to relationship banks without open bidding contests, competition has been ever tougher. With fewer transactions around it could be argued that banks will be even keener to win arranging mandates.

But tied in with the moratorium are changes in the electricity trading arrangements. In the past few months it has become clear that, in certain cases, sponsors and lenders are unaware of the implications new arrangements could have on their power plants.

Says Mark Coker, partner at law firm Freshfields in London: ?The trading review has been on the cards for a couple of years and it is a response to the perception that the pool price mechanism ? in operation since 1990 ? is too generator-friendly. The idea is that the government needs to change the rules on how electricity is to be traded to remove those imbalances. ? Under the new arrangements, power purchasers would have a greater control in deciding what they should pay. In turn, power producers will have less say.

At a recent seminar in Washington, Callum McCarthy, the UK's new gas and electricity regulator, said that independent power producers and other generators cannot expect any specific provisions to be made as part of the reform process to guarantee that the commercial effect of their contracts is preserved. According to a May 1999 article by Freshfields: ?The universal pool will no longer exist. The new forward and future markets will place greater emphasis on bilateral trading.

We therefore suggest that industry participants should consider the implications of this for the design of the contracts they will be using in the future. The article adds: We expect to see significant changes in the way companies choose to sell power and the risks they accept.

And while the decision on the moratorium and the new trading arrangements is imminent, banks and sponsors are looking elsewhere for their deals. This is not satisfactory. Says Neil Smith, managing director for InterGen UK in Edinburgh: We've supported pool reform but the government needs to deliver on the second half of the program which is to lift the moratorium in 2000. To do one without the other would send out the wrong signals.

With the details of some transactions still to emerge, there is evidence that some lenders are picking their deals carefully. Says Stephen Crane, head of power structured finance at Greenwich NatWest in London: In Shoreham we were attracted by the gas contracts. Rather than having a single contract, there is a blend of contracts with different indexations three contracts with different maturities. The element of spot gas purchasing gets greater as time goes on. This gives the deal greater flexibility. He adds that The UK power deals financed recently have been quite nicely tailored to sponsors. They are still attractive and with gas prices reasonably low and the turbine market competitive, they are strong deals.

To be fair some lenders are heeding advice over future market uncertainties. Says Dick Burge, director of project finance at Bank of Scotland in Edinburgh: Yes deals have got progressively more aggressive it's obvious as markets learn to understand merchant risk and structures have become more flexible. Coverage ratios in particular are very important and you have to put your deal through some fairly severe downside scenarios. In recent deals this has resulted in an increasing use of subordinated debt.

Says Coker: Recent deals have had debt-to-equity ratios of 60:40 rather than 80:20 or 90:10 and there have been higher levels of subordinated debt to give a cushion to the senior debt.

In other cases sponsors are turning away from more conventional project finance-type deals. Financing for Ferry Bridge and Drax involve more acquisition-type financing, while Enron's innovative derivatives financing for its Teesside power plant could provide the template for other existing operators. Under the terms of this deal, debt securities secured on dividend payments to Enron Europe Power 3 are issued. Proceeds of these notes will be lent to Enron Europe to repay part of its existing bridge facility for its Teesside plant.

While some arrangers in non-recourse finance deals such as the AES Barry refinancing are aware of the potential risks, banks participating in syndication have been less enthusiastic. While the Barry refinancing deal was termed a connoisseurs deal, it received a lukewarm response in syndication, indicating one of two things either it was badly structured, which it wasn't, or participant banks do not really understand merchant risk.

Says one banker: Over half the merchant power deals, in our view, do not have adequate structures. And many bankers are looking at the deals from a traditional IPP perspective. They are entirely inappropriate. A lot of banks just don't get it.

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### Contract for differences

Contract for differences (CFD) arose as a result of the electricity trading arrangements in England and Wales (the Pool system). The pool itself is a financial settlement system between buyers and sellers of electricity. Physical delivery to end users is administered by the National Grid. CFDs acted as a purely financial instrument to fix the price of electricity in the same way as US-style power-purchase agreements.

Source: Stephen Crane and Bernard Howard's article on UK power projects, Project Finance News, March 5 1998

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## UK IPP pricing and structures ? how the market is developing

Philip Carter reports.

The UK independent power project market has seen a renewed bout of activity over the past six months or so with a raft of deals being brought to market. But it is difficult, and perhaps too early, to spot any specific trends. ?I think the market is at a transitional stage at the moment,? says one power financier in London. ?And as such the picture is somewhat confused. However, I expect that the fate of the latest deals will give everyone a better idea of where the sector is going.?

Part of the reason for this uncertainty in direction is that merchant power projects still represent a relatively new asset class for syndicate banks, as such banks are cautious in committing to them.

These projects are essentially being banked on forecast cashflows from a still evolving system ? the English and Welsh power pool ? gaining credit approval is often a tough slog according to some bankers.

Structurally, the deals which have been, and are due to be sold are broadly similar in terms of multi-tranched facilities which are highly leveraged. These deals also typically feature a plethora of small tranches devoted to fuel costs, cost over-runs and working capital requirements. Another common feature is the growing use of full recourse equity bridge facilities. With many of the sponsors of these UK independent power projects operating and developing various other similar projects around the world, there are constraints on their limited equity. Sponsors are keen to take advantage of equity bridges during the construction phase rather than tying up equity which will remain essentially redundant until completion.

One area where there does seem to be a trend developing is in tenor. The first two of the new deals to come to market ? the £499.5 million (\$800 million) Dam Head Creek project sponsored by Entergy and the £476 million InterGen-sponsored Coryton plant ? have 17 and 19-year maximum maturities on their project debt elements respectively. Later deals have pushed out maturities a little further.

The £200 million project financing for the Shoreham plant, has a maximum maturity of 20 years. Moving out even further is the £250 million, 400MW Great Yarmouth project whose senior debt will have a 20.5 year maturity.

Other merchant power projects, which are not directly comparable, feature aggressive tenors also. The £123.75 million financing for the AES sponsored Fifoots Point ? the first test of the market's appetite for coal-fired merchant risk ? has a 19 year maximum maturity.

However, apart from Dam Head Creek and Coryton these deals have yet to be fully sold down successfully at time of press. And much of their respective fates will lie in how the market reacts to their pricing. Given the immaturity of the sector as an asset class and the long tenors involved, these deals have to be priced to clear but equally, banks have to compete aggressively to win these arranging mandates. As such they face a difficult balancing act between the sponsors' demands for the most cost-effective debt and the market's demand for appropriately priced risk.

Both Dam Head Creek and Coryton were closely matched on margins of a 125 basis points over Libor and 120bp respectively pre-completion. Post completion Dam Head Creek's drops to 115bp before reaching a final high of 145bp while Coryton steps up to 130bp on completion and then ratchets up to a final 160bp. Both deals were well supported in the market.

Deals still to be fully syndicated include Shoreham, Fifoots Point and Great Yarmouth (see pages 22 and 43). While these deals are considerably smaller in size than both Dam Head Creek and Coryton it remains to be seen whether their arrangers have struck the correct balance between aggression for their clients and market clearing pricing. Timing may be the crucial factor ? as each of these deals gets booked, bank capacity for similar new assets will begin to get harder and harder to locate.

Applications under section 36 approval	
Project name	project company/sponsor
Humble Hill	EcoGen
EG King's Lynn extension	Eastern Generation Services
Swansea	Abertawe Power
Enderby	Scottish Power
Cottam extension	PowerGen
Fiddler's Ferry extension	PowerGen
Littlebrook extension	National Power
BP Chemicals	Baglan Cogeneration Company
Capenhurst	Scottish Power
ICI Chlor-Chemicals Runcorn	Scottish Hydro
Elland	Yorkshire Cogeneration
Rhosgoch	Canatxx Energy Ventures
Rugeley B	Eastern Generation
Drakelow C	Eastern Generation
Porth yr Ogof ? Wylfa	Magnox Electric
Blackburn Mill	Scottish Power
Malpass Quarry	Scottish Hydro-Electric
Kemira	PowerGen
Ravensthorpe	ABB Energy Development
Kent Power Station	Kent Power (Enron Europe)
Langage Energy Centre	Wainstone Power
Britannia Zinc	Scottish Hydro-Electric
Rassau Power Station	Enron Europe
Fort Dunlop	RR Power Development
Sleaford	British Energy Investments
Waste Incinerator	London Waste
North Lincs Power	Southern Energy UK Generation
West Burton	Eastern Generation
British Sugar	British Sugar
Little Barford	National Power
Shoreham	
Cost: £200 million (\$320 million)	
Sponsors: Scottish Power and Central and South West Corporation (CSW)	
Borrower: South Coast Power	
Financial adviser: Schroders	
Financing:	
Debt: £187.5 million	
Tenor: 20 years	
Pricing: 120 basis points during construction falling to 115bp immediately post-completion before ratcheting up to a high of 135bp	
Arranger: Greenwich NatWest	
Great Yarmouth power	

Sponsors: BP-Amoco and Atlantic Richfield (Arco)
Cost: £250 million
Financing: The £250 million financing is split between 85% of senior debt, 2.5% of subordinated debt and 12.5% equity.
Tenor: 20.5 years
<b>Dam Head Creek (1999)</b>
Sponsor: Entergy Power Development
Arranger: WDR/UBS
Total financing: £499.5 million (\$800 million)
Debt: Senior project debt: £463.4 million
Tranche A: is the deal's only non-project risk facility and is split between a £35.8 million equity bridge and a £35.8 million subordinated debt bridging facility. It has a margin 30 basis points over Libor .
Tranche B: split into two parts: a £238.8 million, 17-year amortizing credit and a £50 million, 14-year bullet facility.
Tranche C: £20 million cost overrun facility.
Tranche D: £10 million working capital facility.
Tranche E: £35 million gas letter of credit (LC).
Tranche F: £18 million National Grid guarantee facility.
Tranche G: £20 million hedging LC.
The tenor on tranches B to G is 17 years from June 1999, broken down between two years construction and 15 years of operation. The margin for these tranches is 125bp pre-completion, this then drops post-completion to 115bp for years one to four, before rising from years four to 10 to 120bp and to 130bp from years 10 to 14. From year 14 the margin rises to 145bp through to final maturity.
Commitment fees for tranche A are set at 10bp and at 37.5bp for tranches B to G.
The £36.1 million subordinated debt tranche has a 12-year maturity and a drawn margin of 450bp.
Total debt maturity: 17 years
Debt to equity ratio: 90:10
Turnkey contractors: Mitsubishi Heavy Industries/Raytheon
Fuel supplier: Shell Gas Direct
<b>AES Barry refinancing</b>
Sponsor: AES
Debt: £123 million (\$199 million)
Lead arranger: IBJ (lead) with Bank of Scotland and Lloyds
Debt: £102 million, 20-year loan priced at 140 basis points over Libor for years one to 15-and-a-half and 180bp until year 20. The loan has a five-year grace. There is also a £12.5 million letter of credit (LC) from the sponsor and a 12-month debt service reserve (DSR) account. The deal is viewed by some as being controversial because 80% of the debt will still be outstanding by year 10 but those close to it argue that no other project forces the sponsors to be locked in for 20 years with the LC and DSR account.
<b>Coryton power plant (1999)</b>
Total cost: £470 million (\$765.8 million)
Sponsor: InterGen (jointly owned by Bechtel and Shell)
Financing:
Tranche A: £139 million equity bridge loan priced at 35 basis points over Libor
Tranche B: £284 million senior long-term credit facility
Tranche C: £48 million, letter of credit facility
Tranche D: £5 million working capital facility

Pricing on the three non-recourse finance tranches (B to D) starts at 120bp up to and including completion, rising to 130bp from final completion until June 30. The pricing rises to 135bp from July 1 2006 to June 30 2011, 145bp from July 1 2011 to June 30 2016 and 160bp thereafter.
Arrangers: Credit Suisse First Boston
Additional underwriters: Bank of America, HypoVereinsbank, ABN Amro, Banque Paribas, SG, KBC and Lloyds
Lump-sum turnkey contract: Bechtel
Equipment supplier: ABB
Lawyers: Clifford Chance (sponsors) and Shearman & Sterling (lenders)
<b>SaltEnd power project (1998)</b>
Total project cost: £790 million (\$1.3 billion)
Debt/equity ratio: 90:10
Arranger: Warburg Dillon Read
Co-arrangers: NationsBank, Toronto-Dominion, Dresdner Kleinwort Benson, Barclays Capital
Financing: £646 million senior debt and £72 million subordinated debt
Sponsors: Entergy and BP-Amoco
Contractors: Mitsubishi and Raytheon
Target completion date: January 24 2000
<b>Enfield (1998)</b>
Sponsors: NRG and Indeck
Cost: £219 million (\$339 million)
Lead arranger: ABN Amro
Debt:
Tranche A: £155 million construction loan
Tenor: 20 years
Pricing: 120 basis points over Libor for the first two years, 135bp for years one to three post construction, 150bp for years six to 15 post-completion, 175bp for years 16 to 20.
Tranche B: £19.3 million, two-year bridge facility with a margin of 35bp
Tranche C: £36 million , 20 year
Tranche D: £5 million credit facility
Tranche E: £2 million letter of credit
<b>Sutton Bridge (1997)</b>
Cost: £300 million (\$500 million)
Sponsor: Enron
Bookrunners: BZW and Merrill Lynch
\$150 million fixed rate bond
Tenor: 25 years one month
Coupon: 7.97% accruing semi-annually from June 9 1997
Spread at launch: 120 bp over 2007 US Treasuries
Average life: 14 years
£195 million fixed rate bond
Coupon: 8.0625%
Tenor: 25 years, one month
Issue price: 99.523%
Spread at launch: 135 basis points over 9% 2011 Gilt
<b>Barry (1997)</b>
Sponsor: AES

Debt: £112. 5 million (\$185 million)
Lead arranger: IBJ
Tranche A: £91 million construction loan split into two sub-tranches A1 and A2. A1 is an £81 million facility. A2 is a £10 million tranche.
Tenor: maturing October 1 2008
Pricing: Both tranches are priced at 120 basis points for years one to five, rising to 125bp for years six to 10 and 135bp thereafter.
Tranche B: £3 million standby cost overrun facility
Tenor: Due October 1 2008
Pricing: 150bp for years one to five and 160bp for years six to 10,
Tranche C: £5 million revolving working capital facility
Tranche D: £13.5 million letter of credit for gas supply
<b>Rocksavage (1996)</b>
Sponsors: InterGen and Pacific Gas & Electric
Cost: £358 million (\$551 million)
Financing:
Tranche A: £228 million loan, with an 18-year tenor
Pricing: 117.5 basis points over Libor pre-completion, dropping to 112.5bp for years one to five, 120bp for years six to eight and 130bp thereafter.
Lead arranger: Credit Suisse First Boston
Tranche B: £70 million bridge loan, with a three-year tenor

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