Panda Ethanol: Mix for a mix

Panda Energy closed the financing for its 100 million gallon ethanol plant on 31 July. The deal took longer to close than initially expected, but the end result comprises several highlights. The deal is unique in comprising a mixture of three types of debt – a bank loan, subordinated debt and a municipal bond offering. In addition, the plant will be the largest biomass-fuelled ethanol plant in the US, the largest ethanol plant in Texas, and the first to use cattle manure to produce ethanol plus 83,000 tons of animal feed per year from distiller's grain by-product.

The final breakdown of the $158.1 million senior secured debt, underwritten by Societe Generale (SG), is a $103.1 million term loan maturing in 2013 priced at 375bp over Libor and stepping down to 350bp after construction; a $5 million working capital facility maturing 2011; and a $50 million letter of credit facility, also maturing 2011 and supporting the issuance of tax-exempt bonds from The Red River Authority of Texas. Panda also closed a $30 million subordinated debt facility from a single, unnamed, hedge fund, because it could raise this at a substantially cheaper cost than equity.

The tax-exempt bond portion provides Panda with some advantage in price efficiency, because the bonds have a longer amortisation period and Panda was available to issue the bonds at a lower price than taxable bonds. The project qualified for municipal debt as the facility addresses a state environmental issue: the disposal of manure that exudes methane.

The $50 million in issuance represents the portion of the project that can be construed as furthering the environmental goals of the Red River Authority. In common with the typical constraints of municipal financing, the authority is the nominal owner of the facility, and the developer leases it back. This structure provided additional complications, but the use of the municipal tranche does help in engaging Panda, known for its work in courting communities where it builds assets, with its new hosts.

The bonds are priced extremely cheaply (the leads would not provide the exact level) because bondholders essentially rely on the SG-provided letter of credit for repayment. SG and its syndicate thus assume project credit risk on the letter of credit, because they will recover draws on the letter of credit from project cashflows, and the pricing on the LC and term debt reflects this. The arrangement does not, therefore, provide a huge pricing benefit, but does simplify security and documentation issues between senior lenders.

There was some difficulty in coordinating the three types of debt, says Michael Trentel, CFO at Panda Energy, specifically in managing three components for contemporaneous closing within a few days of each other. One adviser close to the process described co-ordinating the debt facilities as "brutal." The debt financing closed on 28 July and the municipal bond portion on 31 July.

SG was mandated as sole underwriter in December 2005. The bank had a relationship with Panda following its co-lead position with Citigroup in the TECO-Panda transaction in 2001. Trentel says, "at the time we thought the project finance market offered better opportunities than the B loan market as the intent was to bring in some agricultural banks, but we also wanted to expand into the commercial bank market. We thought SG could bridge the gap between the two. Because we have multiple projects in the pipeline we want to have a large capital market from which to draw in the future."

It took a long period of education before lenders were comfortable with marrying the concepts of manure and ethanol. The project began life in 2004 as a biomass to electricity facility. By the first half of 2005 it had morphed into a green-field energy combination project; a cattle manure component linked an ethanol facility. Panda decided that a power purchase agreement for renewable energy would not support a manure-to-energy project and searched for an alternative use for the steam created from the waste.

Ethanol was selected as the most economically viable option for the project. Hereford is home to an extensive cattle population and therefore also a distiller's grain market. In addition, the plant is closer to the California ethanol market than a Midwestern plant. The high concentration of manure in the area provided the sponsor with a unique opportunity to marry biomass and ethanol.

But the use of gasifier technology meant that some lenders could not easily take on board what the technological risk was. The Hereford plant is more complicated not only from a technology aspect but also in its capital structure. And the ethanol market is still relatively in its infancy. Lots of participating investors had not previously participated in ethanol deals; the commodity risk and market dynamics therefore had to be understood. As Brett Murphy in SG's project finance group says, "some banks are still getting up the curve on ethanol."

Hereford has in excess of 3.5 million cattle within a 100-mile radius, and Panda has five- and 10-year contracts in place for more than twice the manure it needs for the plant, which provides it with some fuel price certainty. The downside for Panda is that manure-fuelled ethanol plants cost on average $40 million more than a comparable-sized conventionally fuelled plant. But Trentel says that the economic benefits of avoiding exposure to volatile natural gas prices outweigh this. Lurgi is the engineering, procurement and construction contractor for the project.

The structure used within this deal will likely be used again on Panda deals and other ethanol projects. Trentel says "I think there will be interest from other developers in the subordinated debt component. For a developer it's an interesting piece of capital, wedged between senior debt and equity costs. The bond feature is very specific to concentration of biomass and having that opportunity is very unique. Others will be looking for these biomass opportunities and Panda is also considering other sites for 100 million gallon facilities with biomass opportunities". ■

Panda Ethanol Hereford LP

Status: Closed 31 July
Size: $250 million
Location: Hereford, Texas
Description: Biomass-fuelled ethanol plant with a 100 million gallon capacity
Sponsor: Panda Energy
Debt: $158.1 million
Bank debt underwriter: Societe Generale
Legal counsel to the sponsor: Chadbourne & Parke
Legal counsel to the bank lenders: Baker & MacKenzie
Legal counsel to the subdebt provider: Reed Smith
Municipal bond counsel: McCall Parkhurst & Horton
Independent engineer: RW Beck
Marketing consultant: SJH
Gasifier technology provider: Energy Products of Idaho