

Shepherds Flat - Oregon's big US wind farm

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The Shepherds Flat project, sponsored by GE Energy Financial Services (GE EFS) and Caithness Energy, entered into the running for the biggest deal of 2010 when it reached financial close in December last year.

The large-scale, greenfield US\$1.9bn wind farm [\[Transactions Database\]](#) is supported by a US\$1.3 billion loan guarantee from the US Department of Energy (DOE) granted in October 2010 under the Financial Institutions Partnership Programme (FIPP).

The project was approved and awarded a site certificate for construction and operation by the Oregon Energy Facility Siting Council in August 2008 and Caithness Energy signed a contract to pay GE EFS US\$1.4 billion for 338 wind turbines in December 2009. Construction is expected to be complete by 2012.

Big and bold

Shepherds Flat represents an unprecedented use of the private capital markets to promote US renewable energy development. It is the sixth clean energy project to complete a loan guarantee offer and the largest DOE-guaranteed transaction to be broadly distributed to lenders and investors. The financing is the largest wind energy project debt financing to date.

Once complete the wind farm's 338 turbines will sweep across some 30 square miles (78 sq km) of the Gilliam and Morrow counties in Oregon, USA.

The 845MW wind farm marks the US debut, and largest single global order, of GE's 2.5xl wind turbines.

Caithness Energy estimated that Shepherds Flat will inject some US\$16 million of direct economic benefits into Oregon annually. The company projected that the project would create 400 jobs during the construction of the plant – work that includes building 85 miles of road and 90 miles of connections to the power grid. Some 35 employees will also be required to operate the plant once construction is complete.

With the capacity to generate two billion kilowatt-hours per year of renewable energy, the wind farm will represent more than one-tenth of Southern California Edison's overall renewable energy portfolio.

Financial nuts and bolts

Financing includes US\$1.2bn in debt – US\$525m of fixed-rate private placement bonds and US\$675m of floating-rate loans – and US\$231.2m in letters of credit.

Tenors on the deal are construction plus:

- 19.5 years for the fixed-rate bonds
- 12 years for the floating-rate term loans
- 5 years for the letters of credit

An innovative pass-through trust structure was used to monetise the 80 per cent DOE guarantee. The “stripping” of the guarantee was achieved by having two Delaware business trusts (one for the fixed-rate and one for the floating rate) hold the guaranteed debt and issue two tranches of trust certificates or loan beneficial interests.

Debt was provided by a group of 26 institutional investors and commercial banks, including:

- Citigroup (MLA)
- Royal Bank of Scotland (MLA)
- Bank of Tokyo-Mitsubishi UFJ (MLA)
- WestLB (MLA)
- Scotiabank
- Dexia
- Helaba
- United Overseas Bank
- CoBank
- BayernLB
- Intesa
- Santander
- BBVA
- Sabadell

Power will be sold to Southern California Edison – a unit of Edison International – under a 20-year PPA signed in August 2008.

Greengate LLC acted as financial advisor to the US government DOE and Clifford Chance provided legal support. Legal advisors on the lender side were Milbank, Tweed, Hadley and McCloy. Chadbourne and Parke were the project legal advisors.

Consultants on the project include:

- Wind Consultant – GL Garrad Hassan
- Independent Engineer – GL Garrad Hassan
- Transmission Consultant – Navigant Consulting
- Insurance Consultant – Moore McNeil

The pentagon obstacle

In April 2010 progress on the project came to a month-long standstill when the Department of Defence blocked the construction of Shepherds Flat due to an assessment that the turbine blades would block signals from an Air Force radar station located in Fossil, endangering Air Force pilots flying in or out of the area.

In a special notice made by Oregon’s Senator Jeff Merkley on 30 April, the end of the blockade was announced. The Pentagon eventually decided to upgrade a nearby radar system which had until then put the project’s future in danger. The government’s announcement also eliminated the threat to other planned wind farms in the area. Senator Ron Wyden said of the decision:

“In allowing this project to go forward both the White House and the Pentagon have underscored their commitment to U.S. energy security.

As I have said throughout this effort, blocking this project would have had a chilling-effect not just on Shepherd’s Flat but

on private investment in new energy projects across the country. As a member of both the Senate Committees on Energy and Intelligence, I am convinced that national security and energy security are not only compatible they are one and the same.”

1705 loan guarantee assessment

The DOE said the closing of the Shepherds Flat transaction reflects the market acceptability of the loan guarantee model under the FIPP, including cooperation among multiple creditors.

Nevertheless the programme has come under some wider criticism over the past year. In July 2010 the US Government Accountability Office (GAO) issued a report assessing some of the programme's failings.

In theory the programme enables companies to finance projects at a better interest rate and a lower cost than would otherwise be available to them. This nod from the government and the promise to back a loan if the company cannot make good on it lowers financial risk and attracts potential equity investors. However, the GAO report outlined issues in implementation, management of the numerous applications, feedback and clarity of overall programme goals.

In November 2010 a [leaked document](#) from White House officials to President Barak Obama put forward several options for revamping the programme.

One of the suggestions to “reprogram” would effectively dismantle the loan guarantee programme entirely, however, the Office of Management and Budget promptly ruled this possibility out, telling *Earth2Tech* that: “The Administration is committed to the 1705 loan programme and the role it plays in helping us bring about a clean energy economy and creating jobs in this burgeoning industry. The memo was drafted several weeks ago to tee up a wide array of options and issues for consideration. The Administration’s policy is not to propose the re-programming of 1705 funds; our focus instead is to continue our commitment to make the DOE loan programme work effectively.”

Market reaction

According to Citi, capital markets distribution (into the U.S. Private Placement market) received strong sponsorship from large credit focused accounts.

The high recovery rate on the debt resulting from the partial DOE guarantee also prompted sponsorship from first-time buyers of wind project debt who viewed the investment as a prudent way of legging into a new asset class. This in turn facilitated a deepening and expanding effect on the investor market available to developers and sponsors of renewable energy projects.

Project at a glance

Project Name	Shepherds Flat
Location	Gilliam and Morrow Counties, Oregon, USA
Description	A large-scale, greenfield 845MW wind project
Sponsors	Caithness Energy and GE Energy Financial Services
Total Project Value	US\$1.9 million
Equity	US\$702 million
Debt	US\$1.4 billion (\$675 million floating rate facility, \$525 million fixed-rate private placement and an additional \$231 million in Letters of Credit)
Debt:equity ratio	67:33
Mandated lead arranger	Citigroup Royal Bank of Scotland Bank of Tokyo-Mitsubishi UFJ WestLB
Financial adviser to authority	Greengate LLC
Financial adviser to sponsors	Citigroup
Legal adviser to lenders	Milbank, Tweed, Hadley and McCloy, Clifford Chance (for DOE)
Legal adviser to sponsors	Chadbourne and Parke

Consultants	Wind Consultant – GL Garrad Hassan Independent Engineer – GL Garrad Hassan Transmission Consultant – Navigant Consulting Insurance Consultant – Moore McNeil
Date of financial close	16 December 2010

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