North American Manufacturing Deal of the Year 2009

01/03/2010

A US-based solar photovoltaic manufacturer is the first applicant to close a loan guarantee with the US Department of Energy under its 2005-mandated call for applications, and the first to do so since the 1980s. The $535 million loan guarantee offers hope to renewable, IGCC, and nuclear generators looking to put together similar financings. The process may be long and unfamiliar, but Solyndra proves that there is ultra-cheap debt waiting at the end.

Solyndra was founded in 2005, is based in California, and its backers include Argonaut Private Equity (with 35%), CMEA Capital, Masdar, Rockport Capital, Artis, Madrone Capital, Redpoint Ventures, US Venture Partners and the Virgin Green Fund. Its unique selling point is a cylindrical type of module that allows the collection of reflected sunlight from roofs and therefore greater capacity per square foot.

The producer's target market is the commercial real estate sector, which typically has large facilities suitable for such installations. Solyndra began operations in June 2008, and up to the end of September 2009 had shipped 17.2MW in units. The first production unit, Fab 1, has a production capacity of 45MW per year, though the sponsor hopes to increase this to 110MW.

Solyndra's technology is early-stage, and not in wide adoption, and it has produced losses since its founding. The solar photovoltaic module market is competitive, and experienced a glut in the wake of the credit crisis. Manufacturers need to have a strong balance sheet to impress the providers of debt and equity to the owners of the finished units.

The sponsor developed the first facility, Fab 1, through a combination of equity placements and a loan from HSH Nordbank that closed in April 2007. That loan was repaid with the proceeds of equity placements, but the $733 million cost of a second plant, Fab 2, would have required hugely dilutive quantities of equity.

Solyndra was at a hugely advantageous stage in its development. Its technology is new, yet it has an existing manufacturing facility, customer base and successful installations. Developers of generating projects need to balance the demands of a single powerful offtaker and those of its lender, as well as reassure both sides that technology risk is manageable and costs can be kept under control.

Solyndra, say participants in the financing, probably had the best chance of any of the first wave of applicants for loan guarantees of obtaining commercial debt. Its business model and credit profile, despite its exposure to a number of resellers for support, lent itself to the process.

The US Department of Energy has run a loan guarantee programme before, in the 1980s, though its experience was not positive. A small number of lawyers active in the market even have experience of that phase, which helped in trying to work out what the DoE wanted to avoid doing. The DoE, however, started work using a new set of documents.

Solyndra's guarantee falls under section 1703 of title XVII of the 2005 Energy Policy Act. The act mandated the guarantees for new or significantly improved technologies. Solyndra was one of a set of 16 projects, known as the 'Sweet 16', which were selected in late 2007. At that time the loan guarantee office had a staff of two, and progress was slow. The programme did not bear fruit before the end of the Bush administration.

Solyndra kept the process simple. It did not propose bringing in other lenders, with or without a guarantee. It did not have production or investment tax credits to incorporate into the financing structure. Its large and broad group of equity providers could afford to keep gearing tolerable, and assure the department that it could cope with any project cost overruns.

The project's $733 million cost includes a contingency of $65 million, and the sponsor will establish an additional reserve of $30 million. It will also be responsible for 100% of cost overruns. Few sponsors will have the resources to offer such support. The covenants in the financing agreement for the Fab 2 project also require that Fab 1 reaches particular performance milestones as a condition of continued funding.

The final factor in Solyndra's favour is the loan's relatively short seven-year tenor. The debt matures in August 2016, is available until March 2012, and each draw is priced for a fixed rate at 37.5bp over the constant maturity treasury curve. On the $21.4 million first draw, in October 2009, this made for an interest rate of 2.838% per year. The first phase will have an annual production capacity of 250MW per year.

Solyndra has since filed a registration statement for an issuance of up to $300 million in stock, for which Goldman Sachs, its financial adviser on Fab 2, and Morgan Stanley are underwriters. It will use the proceeds of that offering in part for a $642 million phase II expansion of the Fab 2 plant. It also applied, in September 2009, for a $469 million DoE guarantee for the second phase of Fab 2.

The lessons from Solyndra's experience are available to other developers, but they don't all translate perfectly. Solyndra's senior vice-president for business development, Kelly Truman, declined to be interviewed in detail, citing the IPO quiet period, but said that sponsors should dedicate sufficient resources to navigating the loan approval process. The department's loan guarantee office, during its early months, did not have the resources to match many of the applicants. It is now much better staffed.

Solyndra Fab 2 LLC
Status: Signed September 2009, funding pending
Size: $733 million
Location: Fremont, California
Description: Cylindrical solar photovoltaic panel manufacturing plant
Sponsor: Solyndra
Equity: $198 million
Debt: $535 million
Provider: Federal Financing Bank
Tenor: 7 years
Margin: 37.5bp over constant maturity treasury curve
Guarantor: US Department of Energy
Sponsor financial adviser: Goldman Sachs
Independent engineer and market consultant: RW Beck
Sponsor legal adviser: Wilson Sonsini Goodrich & Rosati
Guarantor legal adviser: Morrison & Foerster