

# First Light: The sunny north

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SunEdison and SkyPower Corp's First Light solar park project in Ontario is the first utility-scale solar to reach financial close in Canada, and is the largest solar farm in North America to date. The C\$100 million (\$79.6 million) project includes roughly C\$80 million in debt, which has been underwritten by Nord/LB. The debt has a 15-year term, and is structured with a balloon payment at maturity.

The sponsor has already secured nine power purchase agreements (PPAs) with the Ontario Power Authority (OPA), two of which are with projects covered by this financing. The financing mandates for the remaining seven PPAs will be bid nearer their construction dates. The power generated from the first project will be distributed through the Hydro One utility, with the electricity primarily consumed in the nearby township of Stone Mills.

The 19MW project is to be constructed in two parts; the first 9MW section is to be built on 178 acres in Lennox and Addington Counties and the next 10MW on another site. The other 10MW plants are being developed throughout Ontario. Nord/LB intends to bring in another lender by March 2009, when it will need to fund on the second 10MW phase of the project. According to market sources, another bank, HSH-Nordbank, had been lined up as co-mandated lead arranger at the outset of the deal, but backed out due to funding constraints.

One difficulty facing the project was that SkyPower's majority shareholder was Lehman Brothers, with a 78% interest, and Lehman had been anxious to attach its name to the project in its earlier stages. While the Lehman bankruptcy has not had an immediate impact on the project company's operations, sources close to the deal suggest that a buy-out of SkyPower may be imminent. But the uncertainty over SkyPower's future, rather than any actual financial distress, may have clouded lender perceptions of the deal.

SkyPower is better known as a wind developer, and has developed several projects in Ontario and elsewhere. SunEdison, on the other hand, has built up expertise in the installation of large PV arrays, often on the roofs of large commercial and public facilities. It has also produced a few projects for utility customers, although its presence in Canada has been limited until now.

Because solar plants are so much more expensive than coal or gas-fired power plants, the cost is often viewed as prohibitive, especially in the US, where new solar installations, and utility-scale ones in particular, have been few. Canadian solar projects differ decidedly from their US counterparts, most importantly in their reliance on premium-priced power tariffs rather than tax subsidies. In Canada, developers can finance new capacity cleanly and simply, though they do have to master the disparate tariff regimes in each province.

In Ontario, generators receive a feed-in tariff through the province's renewable energy standard offer programme, which it launched in 2006. The OPA offers preferential tariffs to renewable generators, with the level varying according to the technology used. The rate it pays for solar energy is C\$420 per MW (or C\$0.42 per kWh).

The OPA has already reached its aim of contracting 1,000MW of renewable generation over a ten-year period. It is now in the process of developing its programme further, and may begin to offer PPAs with terms of longer than 20 years. However, some of the contracts it has awarded are not yet in development or under construction, and given the economy and the number of PPAs awarded, many believe that a large proportion of the potential projects will not get off

the ground.

Projects are suffering from constrained sponsor equity, since developers are mainly small domestically-listed players or larger privately-held developers from the US, and are finding it difficult to muster the additional resources to start work on construction. Banks in North America are closed to new business, or open only to large clients. Whereas Acciona's Nevada Solar One project attracted commitments from lenders eager to build up a track record with the technology, such forward-looking lending activity is no longer a priority.

The construction involves the installation of thin-film solar panels, as photovoltaic modules, and related technology. The panels contain cadmium telluride (CdTe), a crystalline compound of cadmium, tellurium and zinc; they are coated with a glass-based polymer. Though it is less efficient than the alternative, crystalline polysilicon-based panels, CdTe is much more cost-effective. Given that the project is located in a rather remote part of the Ontario countryside, the greater area that the CdTe panels use is not a problem, as the real estate is readily available. The sponsor also opted for flatbed-mounted panels, rather than those which follow the sun, again because it viewed the configuration as more cost-effective.

The panels degrade at just 0.5% to 0.7% per year and should not need to be replaced for about 30 years, although the cost of replacing panels is minimal. Under optimum circumstances, a solar farm can be constructed at the rate of 0.5MW per three weeks. Installation of the first 9MW is due to be complete by June 2009, with the second phase to be completed three months later. Black & Veatch is the independent engineer for the project, while SunEdison is constructing the project and broke ground in April 2008. The panel supplier is believed to be US manufacturer First Solar, and the economic downturn is also believed to have resulted in a better price for the developer, since demand for panels, once hot, has cooled off a little. The insolation in the region is much less variable than, say, wind power projects, and thus the risk is also diminished. Though the Canadian climate may not obviously be suitable for solar projects, the region's insolation is 30% greater than in Germany.

Because the technology is relatively simple to install, lenders view the risk of solar projects through the prism of the risk profile of the province, which is rated double-A. Ontario's progressive approach to encouraging renewables allows projects and their financings to be more straightforward. First Light, so long as it can bring the second phase online and attract a larger bank group, hopes to out to market with the later slate of projects in 2009.

### **First Light**

Status: Closed 21 November 2008

Size: C\$100 million

Location: Lennox & Addington Counties, Ontario, Canada

Description: 19MW solar PV project

Equity: C\$20 million

Sponsors: SunEdison (50%) and SkyPower Corp (50%)

Debt: C\$80 million

Mandated lead arranger: Nord/LB

Tenor: 15 years

Sponsor legal counsel: Goodmans

Lender legal counsel: Davies Ward Phillips & Vineberg

Independent engineer: Black & Veatch

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