Situation and prospects for BSR offshore wind energy

Financing the wind

Photos: Siemens

At the end of 2012, 704 MW of offshore wind capacity is operational in the Baltic Sea, with another 448 MW under construction. There are sufficient wind resources to develop approximately 40 GW of offshore wind energy capacity in the area. However, such development of offshore wind farms in the Baltic Sea will largely depend on the regulatory frameworks offered in the various countries surrounding the sea.

The region's states are at very different stages of economic development and have different starting points as regards their current energy mix – and also different views on how such mix should evolve. Some are still highly reliant on Russian oil and gas imports (for instance, in Poland, 94% of oil, 80% of gas and 70% of coal is imported from Russia) and look favourably at a home-grown resource. Some have access to plentiful and cheap hydro and are in no urgent need of more wind capacity (e.g. Sweden). Some may balk at supporting a sector whose costs of production are still higher than traditional power sources. On the other hand, EU Member States also need to fulfil the Union's existing renewable energy targets.

Financing offshore wind projects in the Baltic Sea

Denmark is the industry pioneer, with clear targets of 2,100 MW set for 2020. A stable tender framework offers selected bidders 15 years of stable cash flows. Germany has a more recent, but well-tested feed-in tariff regime which is supporting a large development pipeline in both the North Sea and the Baltic Sea. The country has recently had to adapt its law with respect to grid connection, but this was more of an issue for the North Sea (where projects are further from shore and require more complex direct current connections). Currently, Sweden, once a pioneer in the sector, does not have any regulatory framework in place to make the development of new offshore wind farms possible: the mechanism provides the same price support for all renewable sources without distinction, which discourages investment in relatively more expensive offshore wind. Despite ambitious targets for the sector (0.5-1.0 GW installed by 2020, 3.5-5.0 GW installed by 2025 and 6-10 GW by 2030) Poland still lacks a dedicated price regime for offshore wind projects, but is considering introducing one next year. The support mechanisms for wind in Latvia and Lithuania are under review. There is no harmonization of policy and regulation at a regional level.

Once the economics make offshore wind projects possible, they can be financed either by relying solely on equity ("balance sheet" investment by utilities or other similar investors) or by using debt in addition to creating leverage on a non-recourse basis (i.e. the banks are reimbursed from the revenues of the project and not by the investors).

To date, the 48 MW Baltic 1 project is the only offshore wind farm in the region to have been project-financed, with EUR 138 mln of debt provided by three commercial banks and the European Investment Bank in late 2011. With less than 10% of the Baltic-installed capacity financed by banks, this is significantly less than the 30% reached across the industry, which largely reflects the fact that most of Denmark's offshore wind farms were built and financed by DONG, the national Danish energy company, on its balance sheet.

On the other hand, the region has seen more activity on the equity side, with a number of transactions whereby the ownership of offshore wind farms was transferred, taking place over the years. For instance, 50% of the Anholt Offshore Wind Farm (400 MW) in northern Denmark, currently under construction, was sold in 2011 by DONG (the developer) to PensionDanmark and PKA, two Danish pension funds.

DONG retains the construction risk for the whole project (i.e. it will pay the full price for the half it sold only if the project is completed on time) but the pension funds take the long term operational (and wind) risk.

Last year, DONG also sold 50% of Nysted Offshore Wind Farm (166 MW), originally built in 2003, to PensionDanmark (50%) and Stadtwerke Lübeck (7%), demonstrating that offshore wind projects still have a long life span even after close to 10 years of operation.

Key risk factors and finance-ability challenges

The offshore wind farm sector is marked by a uniquely complex combination of risks. Projects have to deal with major suppliers coming from very distinct industries and with no natural coordinator amongst them. A lot of the contractors who are involved themselves are breaking new ground in this emerging industry as experience is still scarce. At this early stage of the industry's development, no obvious or industry-standard mitigation route has emerged to date, and risk mitigation approaches between banks and utilities differ significantly.

Offshore wind projects require large amounts of financing, which at a time when syndication markets are closed means bringing in more banks, and having to accept multiple and conflicting requirements, making negotiations complex and time-consuming, as well as expensive. Beyond a general requirement for conservative assumptions, banks tend to demand more influence than usual on the contractual structure and commercial terms, as well as more transparency on technology, supply chains and contractors than investors, and in particular utilities, are used to. The market thus developed in two directions, with utilities funding and developing projects on their own, while smaller developers that required bank funding let their lenders have a large influence over the project.

As an increasing number of banks is attracted to the sector, and large scale transactions including construction risk have become a regular occurrence around the North Sea, certain commercial terms have become standard lender requirements. Lenders generally expect direct involvement in commercial contract negotiations as well as a more intrusive due diligence and more detailed information disclosure requirements. Further, they expect to remain fully involved throughout the construction phase and to keep a close eye on operations once the project is up and running.

Conversely, parties that have the necessary internal project management and negotiation capabilities, and have the experience of complex projects, do not see why they should accept such interference in their core business from lenders. Given that project financing tends to be cumbersome, complex and more costly than balance sheet financing, it has been largely avoided by utilities investing in the sector.

However, as investment requirements increase, this approach may change. In order to accept the constraints imposed by lenders, utilities will need to be convinced that the banks' approach also has some advantages, such as improved risk discipline, improved equity returns and access to new, ideally cheaper, pools of capital. The good news is that the lending market is now showing signs of both depth and maturity, as standards slowly coalesce around a smaller number of key requirements, and more banks (as well as multilaterals and export credit agencies) are active.

But before this can happen in the Baltic Sea region, the neighbouring countries need to follow the path of Denmark or Germany in the North Sea and provide a stable, consistent and reliable regulatory framework. ■

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