Direct power purchase agreements have been around since 2009 and are increasing in popularity. Burges Salmon were legal architects of the first such arrangements and have continued to pioneer in this sector. In this Briefing, we provide detail on direct PPA structures being used in the market.

These structures continue to offer greater choice for generators and large electricity consumers and are challenging licensed electricity suppliers to innovate the pricing of their traditional power purchase agreement ("PPA") offerings.

Electricity supply and private wire export

Traditionally, electricity generated by renewable power projects has been sold directly to licensed suppliers who then trade the power on the wholesale market or supply direct to their customers. Corporate customers wishing to purchase green electricity have been able to sign up to green tariffs. Such tariffs generally will not offer a “guarantee of origin” and provide no direct link with the generator or greater security of supply than traditional brown power tariffs and may be less competitively priced.

Although electricity supply, transmission and distribution activities are heavily regulated, for a number of years private wire arrangements and on-site generation has allowed smaller generators to supply local customers directly, on a licence exempt basis. While this may be a suitable arrangement in certain circumstances, unless there is constant demand for the generating plant’s output, the generator often will require grid access anyway so that surplus power can be exported to grid and revenue generated.

Direct power purchase agreements

Direct power purchase agreements ("Direct PPAs") can bring electricity consumers and generators together irrespective of location, generating capacity and supply requirement. From our experience, there are now two contractual structures prevalent in the Direct PPA market and these are summarised below.

In Direct PPA structures, as the Generator is not supplying the Customer directly (as with a private wire), whichever structure is chosen the Customer will need an electricity supply agreement which is compatible with a Direct PPA structure, allowing the on-selling and crediting arrangements described in this paper.

A compatible supply agreement can be more complicated to put in place than standard electricity supply arrangements and it is likely that the Customer will need to have a sizeable supply requirement for this to be an attractive proposition for both the Customer and its Licensed Supplier. As such it will not be suitable for all business customers. However, for a public or private sector organisation with significant electricity usage this kind of structure can...
provide considerable benefit, helping to help spread the risks associated with fluctuations in electricity prices by acting as a fixed price “hedge” against rising energy costs. In addition it provides a contractual link to an identifiable source of renewable energy generation.

“Price Guarantee Arrangement”

Figure 1 shows the PGA approach. In this model, the Generator enters into a PPA directly with the power offtaker (e.g. the Licensed Supplier) with power prices payable being linked to a specific wholesale market price (e.g. “day ahead” or “month ahead”). There is a separate agreement (the PGA) between Generator and Customer which provides the “price guarantee” mechanism fixing the power price to counteract market price driven fluctuations in revenues under the PPA. This is effectively a form of contract for difference but was ahead of its time from the UK Government’s Electricity Market Reform CfDs. The advantage of this approach is that the Customer does not need to be involved in general PPA negotiations (the PGA arrangements can piggy back on the PPA). If similar arrangements are to be rolled out across a number of projects, an efficient standard form approach can be adopted. In such circumstances, we have found it is beneficial to have a simple framework agreement between the Customer (who guarantees a fixed electricity price under the PPAs) and the Licensed Supplier offering PPAs to generators. While we now have the Government’s Contracts for Difference Support Mechanism for renewables taking over from the Renewables Obligation, there will be projects that do not qualify for those CfDs and, therefore, this PGA structure can still be applicable.

“Back to Back” PPA

In Figure 2, the Customer contracts directly with the Generator for the electricity and then on-sells the electricity (and any renewable certificates) to its own Supplier, who “credits” the Customer’s electricity account with the corresponding amount of electricity.

In both Figure 1 and 2 scenarios, the Licensed Supplier “sleeves” the generation into the supply arrangements between the Customer and Licensed Supplier. Associated renewable certificates can also be acquired by the Customer and on-sold to a Licensed Supplier as appropriate.

Pricing innovation

The pricing arrangements supporting Direct PPAs is the main reason why these structures have continued to be popular in the developer market. While some developers are happy to take the risk on wholesale power prices, their funders are generally more cautious and look for guaranteed minimum power prices on which to base their lending decisions. Downward trends in wholesale power prices have made many refocus on power price risk. Historically, Licensed Suppliers have been risk adverse, offering either no floor price or floor prices which are low when compared to prevailing market prices. On the other hand, corporates in the Direct PPA market have been prepared to offer higher fixed prices which, compared to available floor prices, can be attractive to generators and attractive to their funders who can take these higher fixed prices into account in modelling generation income and specifying terms of funding.

We are seeing a degree of maturity entering the Direct PPA market with more generators and off-takers entering into such arrangements.

Direct PPA Advantages

A number of major licensed suppliers are currently providing Direct PPA compatible supply arrangements and more are coming to the market to take advantage of the continued interest in this kind of electricity purchasing. Licensed suppliers are also seeking out generators interested in this kind of arrangement as they have Customers who are keen to increase the percentage of renewables in their energy mix. This is good news for Generators and large energy Customers as it should make it easier to put such arrangements in place and may reduce the tipping point at which the compatible supply arrangements become viable. >
The advantages of the Direct PPA to Customers and Generators are:

- the generator can often obtain a higher fixed price for its power than has traditionally been available – this can have a positive impact on “worst case” revenue modelling
- the supplier takes the supply risk - the customer’s lights will not go out if the generator suffers an outage
- generators and customers have a significantly wider market available to them for the sale and purchase of electricity the customer is able to spread its exposure to pricing fluctuations by agreeing a fixed or floating price mechanism with the generator. This can complement the pricing arrangements under its general electricity supply agreement
- the Direct PPA structure enables the customer to demonstrate a commitment to renewable energy and carbon reduction targets by identifying specific products and services that are powered by renewable energy from a specific generating facility.

If you would like to discuss any issues raised in this paper, or have any queries in about renewable energy generation, please contact us.