EFET
European Federation of Energy Traders

Legal Committee Meeting - 21-22 September, London

Educational workshop on PPAs and renewable energy certificates

General remark: slides from the workshop are available at the dedicated EFET page: https://efet.org/home/documents?id=707. Partial recording of the workshop is available, which includes a presentation on granular certificates: Update_ Next Legal Committee Meeting - 21-22 Sept, London-20230921_141053-Meeting Recording.mp4. Minutes are only provided for those sessions that were not recorded.

- **Renewable Power Purchase Agreement: choosing the right PPA – Jack Rankin, Regional Lead PPA Transaction Advisory, Pexapark**

Jack Rankinaddressed various aspects of Power Purchase Agreements (PPAs), illustrating the complexity and variability of PPAs. These aspects included exploring the diverse motivations for participating in PPA activities (below (i)), highlighting the contrasting approaches employed by utilities and corporations in pricing PPAs (below (ii)), examining common PPA structures in both Europe and the United States (below (iii)), assessing the associated risks in PPA procurement (below (iv)), and offering insights into the prevailing trends in the current market landscape (below (v)).

Note: in this presentation, the term *PPA* was understood and used as long-term (10-year) power purchase agreements that shift the price risk to the buyer.

(i) Motivations for engaging in PPA activities:

Environmental Commitment: Some early adopters prioritize PPA activities driven by environmental, social, and green concerns, often influenced by regulations or supply chain pressures.

Competitive Edge: Corporates enter the PPA market to gain a competitive advantage by securing electricity at prices below the prior year's wholesale rates.

Varied Utility Roles: Utilities may act as buyers, selling purchased power into wholesale market(s), or as intermediaries supplying energy to corporates directly or indirectly through their supply portfolios.

(ii) PPA pricing differences between utilities and corporates:

Utility Pricing Model: Utilities base PPA pricing on wholesale market dynamics, including selling all their purchased power into these markets. They factor in associated trading costs, like volume mix management and cannibalization risk.

Corporate Pricing Model: Corporates pricing PPAs can often avoid the liquidity costs of the stack and rolling efforts utilities face. Theoretically, corporates have the ability to price at a premium to utilities due to reduced natural cost exposure. Corporate PPAs can exhibit unique characteristics not commonly found in utility agreements. These distinctions include unconventional indexation methods, varying levels of credit exposure depending on the corporate off-taker, and the presence of execution risks. Furthermore, corporate PPAs often entail longer sales cycles.

Market-Specific Factors: In the UK, the CfD scheme, driven by levelised cost of energy and acceptable returns, influences PPA pricing more than utility prices.

(iii) Typical PPAs types in Europe and the United States:

Physical PPAs: Common in Europe, these involve the transfer of physical electricity title from seller to buyer on the same grid, with cash flow one-way from buyer to seller.

Financial PPAs: More popular in the United States, they rely on financial contracts and a "contract for difference" approach, where payments flow based on market price differentials, not physical electricity transfer.

Cross-Border PPAs: A subset of financial PPAs, involving buyers and sellers in different markets.

European accounting standards treat financial PPAs as financial derivatives, affecting financial reporting. In contrast, U.S. standards have a different approach. That's one of the drivers for the prevalence of physical PPAs in Europe, and financial PPAs in the U.S.

(iv) Risks associated with PPAs:

Price Risk: In long-term PPAs, shifting price risk to the buyer is crucial, as wholesale market prices naturally fluctuate.

Liquidity Risk: Often overlooked, liquidity considerations are important for assessing termination payments and damages in PPAs.

Profile Risk: Profile risk is the difference between the baseline and weighted average prices. Ensuring consistent energy generation across hours helps mitigate base load risk.

Cannibalisation Risk: When numerous renewable energy projects are built in close proximity, they are likely to produce too much electricity during peak times. This surplus can lower electricity prices in the market, potentially harming the financial prospects of these projects and the returns for investors and buyers.

(v) PPA market trends:

Shortening of 10-Year PPA Market: The traditional 10-year PPA structure in Europe is evolving. Some corporates are opting for longer-term tenders to secure better prices, while sellers are displaying increased merchant appetite, allowing more revenue flexibility through a merchant approach, including partial output hedging.

Next-Generation Utilities: Corporate buyers, akin to tech giants, exhibit a sophistication similar to traditional utilities, offering increased flexibility in dealings.

Short-Term PPAs: Short-term PPAs serve as financial hedges but may not align with standard definitions and objectives.

Collocation Trends: Collocating storage and renewables, particularly batteries, is gaining prominence and should be considered in future structures.

Large Offshore Wind Developments: Capitalizing on scale and cost reduction, bigger offshore wind projects are emerging, facing economic challenges in markets like the UK, Germany, and Denmark due to increased capex costs.

Buyer-Seller Dynamics and Grid Connections: Tensions between buyers and sellers can shift rapidly within markets. Grid connections remain a critical factor, as projects must secure firm connections before proceeding with development and transactions.

- **Role of the Power Purchase Agreement in the new Electricity Market Design (EMD) proposal – Jerome le Page, Chair of the Electricity Committee, EFET**

Amid last year's price surges, national governments, backed by the European Parliament and the Commission, aim to reform electricity markets. The European Commission initiated the EMD proposal earlier this year, open for public review since March, with an ambitious year-end deadline. This aligns with the simultaneous REMIT reform, also set to conclude by year-end. Parliament has voted on the EMD, but the Council has yet to reach a compromise. Its vote is delayed by over three months, possibly until mid-October. A conflict between in particular, Germany and France is ongoing, with trialogues underway. The aim is to conclude negotiations before the European elections in May-June, but a more realistic timeline is by the end of Q1 2024.

The Commission, along with the Parliament and Council, acknowledges the proper functioning of spot markets, including market coupling. However, focus is now on forward contracts, long-term hedging tools, and investment instruments, which vary across Member States. Among these, Power Purchase Agreements (PPAs), two-way Contracts for Difference (CFDs), and capacity remuneration mechanisms (CRMs) are significant.

PPAs, two-way CFDs, and CRMs are integral to national electricity market designs. While PPAs have diverse definitions, the European Commission envisions two-way CFDs as private contracts between two private parties. However, regulations allow for two-way CFDs

between a private party and market participants, as well as some regulated or public entities, especially for power uptake within PPAs. These instruments are intended to complement markets and future contracts.

Currently, the Parliament's proposal is the sole firmly approved initiative. Three proposals could slightly alter the landscape of the PPA market:

1) PPA standardisation: A European-wide standardisation initiative to be managed by ACER and NEMOs (power exchanges nominated for spot market operation). Voluntary adoption is the goal, with potential for an agreement between Parliament and Council allowing for either national or European-wide standards, or both.

2) PPA Trading Platform: The European Parliament proposing to develop a voluntary trading platform for PPAs.

3) Mandatory database to report concluded PPAs: It's not clear whether such database would be public. Current understanding is that only certain information e.g., volume price and identity of the buyer/seller would be confidential and all others public to increase transparency.