The Role of PPAs in the new Electricity Market Design Proposal

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I. Overall goals with PPAs and differences with other tools

Contribution of PPAs to EC goals with EMD Proposal

- Three major goals of Electricity Market Design proposal (proposed Regulation amending Regulations (EU) 2019/943 and Regulation (EU) 2019/942 and Directives (EU) 2018/2001 and (EU) 2019/944, COM(2023) 148 final of 14 March 2023) ("**EMD Proposal**"):
  1) Empowering customers;
  2) Creating stability and predictability in the cost of energy and increase competitiveness;
  3) promoting renewable energy

➔ Power Purchase Agreements ("**PPAs**") contribute to all of these three goalsd

➔ However PPAs are seen as a real centerpiece for achieving the second goal, stated as "**mitigating short-term market fluctuations in energy prices"**

- Importance of **long-term power contracts**: prices (& revenues) isolated from S-T price formation

  But is this necessarily the case? L-T contracts are not necessarily fixed price contracts?

- L-T contracts achieve another goal: ensure financial resources and predictability to facilitate the deployment of "*renewable and low carbon*" energy (thus lowering financial risk and capital cost)

➔ With the EMD proposal the EC wants to "improve markets for L-T contracts", with PPAs as a tool

Three tools for improving the market for L-T contracts

- EC identifies three tools that could create better conditions for L-T power markets:
  1) PPAs;
  2) Two-way Contract for Difference contracts ("**CfDs**");
  3) Better working forward markets
- According to EC (preambular para. 36) these tools are "*complementary*" – EU Member States ("**MSs**") are free to decide which instruments they use to achieve their decarbonisation targets
- Not always a clear delineation between the instruments:
  - PPAs: direct sale between generator and consumer agreeing on terms for long-time delivery – *"typically 5 to 10 years, up to 20"*

    This means that where we make reference to PPAs we are talking about corporate PPAs, not utility PPAs
  - CfDs: applies for specific types of contracts eligible under governments' direct price support schemes, with this price support scheme providing revenue certainty – only two-way CfDs would be allowed as public investment support scheme
  - Forward markets: direct market but with a short term ("*up to three years ahead*") which does set a fixed future price (which is then hedged)

PPAs vs. CfDs?

- In the EMD Proposal (and in many tender schemes) this is seen as a dichotomy: the volume generated is either (partially) marketed via a PPA or (partially) subject to a CfD

- Distinction is not always so clear: a CfD could also be a price guarantee scheme that is applied by the government in respect of revenues obtained through a variable (indexed) price PPA

- This is often seen as a question of private or public funding for a renewable energy project, but there also the boundaries become more vague
  - You see much more public intervention into PPAs, with the EMD Proposal taking this even further…

- PPAs also identified as the tool for transferring guarantees of origin ("**GoO**") – but would not seem exclusive, as GoOs can be transferred across a wide type of contracts

II. Earlier EU initiatives on PPAs and challenges to be addressed

Precedents of EU regulation of PPAs

- PPAs have been hardly regulated by the EU in the past, gradually more support given in regulations but very few measures with actual impact
  - Renewable Energy Directive 2018 (RED II): definition of renewables PPA; mandates MSs to assess the "*regulatory and administrative barriers and remove them, if not justified*", ensuring that PPAs are not "*subject to disproportionate or discriminating procedures or charges*"; inclusion of policies and measures in the NECPs
  - Proposal for RED III: need for MSs to explore export credit guarantees; to ensure that GoOs can effectively transfer of GoOs to the buyer; effective PPA volumes to be included in NECPs
  - Current Electricity Market Regulation: no specific reference; just highlighting L-T contracts
  - RePower EU: recommendation to MSs to promote renewables PPAs; development of specific guidance (Commission Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating PPAs, C/2022/3219 final):
    - Very programmatory: MSs should swiftly remove any unjustified administrative or market barriers to corporate purchase agreements of renewable energy, in particular for SMEs

Challenges identified

- EC Staff Working Document annexed to PPA Guidance as part of RePowerEU provides a good analysis of difficulties:
  - SMEs: *“limited visibility on their future electricity demand, lower credit ratings, and lower volumes of electricity consumption which makes managing imbalances more difficult. This makes SMEs more hesitant to sign long-term contracts, especially if there is no clarity on the potential impacts if long-term contracts need to be terminated*”;
  - Impact of signing long-term PPAs (whether physical or virtual PPAs) on the company’s balance sheet under the accounting framework for derivatives under the International Financial Reporting Standards (IFRS) is not always clear
  - “*Creditworthiness of an offtaker is another major barrier (and a risk factor) across most sectors. Debt providers to renewables projects continue to require strong credit rating in order to consider the PPA bankable. However, most SMEs are not rated by any major credit rating agency*
  - “*A small but growing segment of consultancy firms has started to offer solutions for SMEs, such as the opportunity to aggregate demand over multiple consumers. The industry itself is also considering mechanisms to aggregate their demand to reduce risks and costs. For example, in Greece a number of electro-intensive industries are working on a “Green Pool” concept, whereby multiple companies pool their electricity demand*”.
- EC in its response to the consultation: PPA market has not been available to SMEs mainly for two reasons: (i) limited energy consumption require multi-buyer or aggregated PPA to make an interesting offer and (ii) complex deals with high transaction costs

III. Guarantees for PPAs

Article 19a (2) and (3): PPA guarantee schemes

- MSs need to ensure that “*guarantee schemes at market prices*” are in place and accessible to customers that face entry barriers to the PPA market, to “*reduce financial risk associated to off-taker payment default*”
- Stated to be “*at market prices*” but if not offered by the market, Member State should step in (“*Union-level instrument to be taken into account*: reference to a future EU scheme?)
- Focus is only on “off-taker payment default”, not on generator default
  - *Prima facie* a measure protecting generators, but necessary to remove market barriers on demand side (bankability requirements)
- Guarantees “*shall not provide support to the purchase of generation from fossil fuels”*
- Should not constitute State aid + include provisions to not decrease liquidity in electricity markets
- EP ITRE Committee Rapporteur report (May 2023):
  - also excluding nuclear generation-based PPAs as a beneficiary from State guarantees;
  - not prevent the subjected generators to participate in balancing and ancillary services markets

IV. Other measures to support PPAs

Role of PPAs in public tenders for renewable energy projects (Article 19a (4))

- Applies to all Member State support schemes for electricity from renewable sources
- Member States should ensure that bidders to public tenders for investment support are allowed to (and can in practice) reserve part of the project's generation for sale "*through PPAs or other market-based arrangements*"

  What are these other market-based arrangements? Could these be sales on spot markets, defeating the purpose of having greater price (and revenue) predictability?

  Generally speaking – would that give the correct incentive to the developer? Will only allow for fixed price PPAs if that price is better than the "strike price" (or on the higher side of the price corridor?)? Would this not be used mostly for variable price PPAs, subjection off-takers once again to the short-term market prices?

- "*Governments shall endeavour to make use of evaluation criteria in the public tender to incentivise the access to the PPA market for customers that face entry barriers*"
  - Can thus deviate from discrimination rule for consumers, applying objective and non-discriminatory criteria (but no guidance on how to set them)
  - In particular, "*giving preference to bidders presenting a signed PPA or a commitment to sign a PPA for part of the project's generation from one or several potential buyers that face difficulties to access the PPA market*"

Other supportive measures for PPAs (Article 19a,

- No prohibition of PPAs not meeting these requirements, but Member States are required to facilitate those types of PPAs to be facilitated
- PPAs to specify bidding zones and the responsibility for securing cross-zonal transmission rights in the event of change of bidding zone (Article 19a (5))

    Another element of complexity, no further discussion of cross-border PPAs

- Exit conditions (fees and notice periods) to be specified (Article 19a (6))
- “more than one electricity supply contract ” - allowing them to have multiple or combined tailor-made contracts (revised Article 4 Directive (EU) 2019/944: free choice of supplier)

    Trend of empowering customers: e.g. TSO Elia consumers may decide to appoint one or more shared access holders (cases of shared supply and bloc supply) entrusted with different and complementary tasks

    Also ensures the other goal of the EMD to allow for dynamic pricing (next to L-T price certainty…)

- Discussion on pooling demand identified in the preamble and Commission guidance, but no specific measure taken

    But unclear how can pooling demand solve the intermittent consumption profiles of SMEs…

- Recommendation that sale of guarantees of origin should also accompany PPAs?

EP ITRE Rapporteur’s proposal for “standardised PPAs”

- Standardised PPAs “to be developed”
  - Function? Just as a template? To be used in the procurement procedures?
- “*designed to match the risk profile of different size customers*”
  - Offer a variety of shorter contract durations, including of up to five years;
  - Offer electricity supply at different timeframes;
  - Provide different price formulas;
  - Be shaped to the load profile required by the customer

    Feasibility could be in question – is this going beyond companies and industry players?

- Also setting up a database to facilitate the collection of important information
  - Report key information, including the “*contracted price structure*” and the agreed energy volume to the regulator

    Exact purpose not clear, could create additional burdens

Relationship of PPA facilitation with liquidity in other electricity markets

- Main concern that PPAs should not reduce liquidity in electricity markets (spot market and forward markets)
  - In public consultation we saw wide-spread support for PPA facilitation in public consultation, but impact on liquidity of electricity markets identified as a risk
  - Issue most prevalent in some bidding zones – EC proposal and it s comments to public consultation float some ideas: revision of collateral requirements, market makers, regional virtual hubs (sales across bidding zones)
  - In order to deal with this liquidity risk, preamble 28 of the EMD Proposal gives a conspicuous example: reducing liquidity risk with PPAs, by "*using financial PPAs*"

    Could be read as a preference in the EMD Proposal for virtual PPAs, as the physical flows can still be sold further on the electricity markets?

    Would virtual PPAs not also be better geared towards more intermittent consumption profiles, lead more to "pay as contracted" PPAs (instead of "pay as produced")?

V. Other developments

Other relevant developments

- EMD Proposal sets an obligation to hedge appropriately on long-term markets for electricity retail companies: direct result of crisis, meant to mitigate risk of over-exposure to price volatility
- No mention of hydrogen PPAs
- No mention of battery storage linked to PPAs
- No real discussion of balancing markets
- Facilitative impact on PPAs is also coming from the EU Taxonomy Regulation, the first EU Taxonomy Climate Delegated Act and the proposed Corporate Sustainability Reporting Directive (CSRD)

Concluding remarks and Q&A

Thank you!

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