Flexibility markets and TSO-DSO Cooperation

Session 4: What's the business case?

Brussels, 13 February 2020

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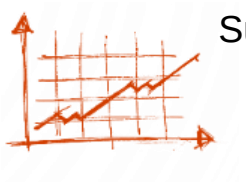
- 1) What's the value in running a platform?
- 2) Who earns money? Where is the money coming from (e.g. from consumers via network tariffs or based on avoided curtailment costs or avoided network investments) and how do you set prices for flexibility?
- 3) If your market has limited liquidity, does your cost of curtailment put a cap on the price of flexibility? If there are no costs for curtailments, what kind of caps do you have?
- 4) for R&I projects: will the project/platform/market continue when the R&I funding stops?

Recap of Roles on the local flexibility market

Certified Flexibility Providers



Submit flex offers

Flexibility Marketplace

Procure flexibility

System Operators

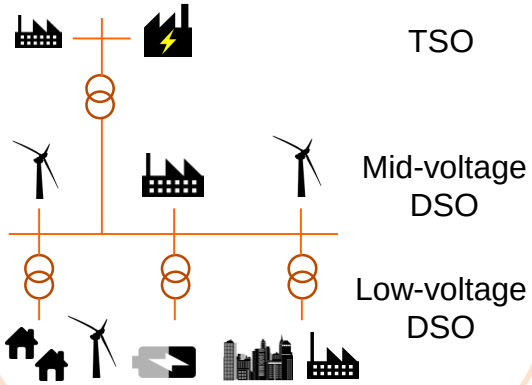
Flexibility offer from:

- Power plants
- Storage
- Renewables
- Aggregators
- VPPs

Market platform
Standards
Transparency
Coordination
Neutrality

- Defines market rules and product specifications
- Admits participants on the market
- Operates the markets by matching flexibility offers and demand from SOs continuously
- Monitors the markets

Flexibility demand from:



The economics of enera

- In the demonstrator case, value in running a platform is linked to the experimental nature of the project and possibility to extend commercially
- DSOs and TSO buy flexibility from Market Participants: congestion management costs recouped through consumers via network tariffs
- Technical price caps (for RES +9,999/-9999 and for non-RES +9,999/-50 EUR/MWh) but reality is quite different:
- Degrees of freedom within existing German regulatory framework limited.
- Price cap determined by EEG according to ‚Anzulegender Wert' of a plant (plant-unique value). In General, low Incentives for generators under the EEG to offer at prices below the plant-unique value.
- Based on the national framework SO has to consider a merit order for EEG-plants which sets heavy constraints on market activities & Business Models
- With current regulatory framework post-NABEG limited possibilities to extend enera beyond 2020…

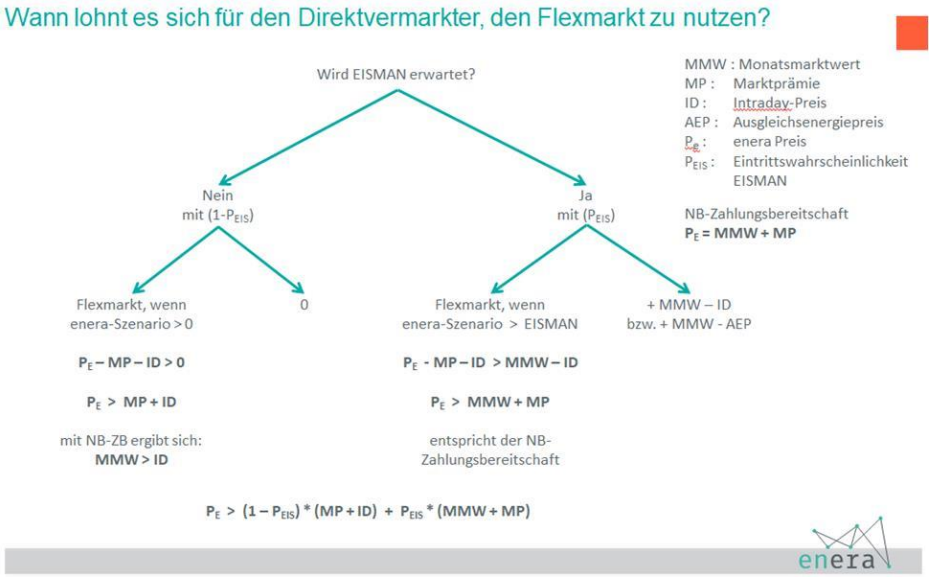
Thank you!

epexspot

part of eex group

Appendix: The economics of enera vs Status-quo

- Renewables vs Einsman



Main takeaway:

- The model is correct in depicting the different drivers of wind flexibility pricing
- However, in a practical situation:
  - ➢ The MMW and MP variables are unknown when the trading takes place
  - ➢ It is difficult to assess the probability of Einsman

➔ Participation of Renewables in the enera market is more difficult

- Load vs Einsman

Variables :
90 = total RES subsidy
45 = enera transaction price
DAM = Day-ahead price
IDM = Rebalancing price
Gas = Newly produced gas value

	Einsman	Enera	
Wind	90 - IDM + DAM	90	
Regulator	-90	DAM - 90	
DSO	0	-45	
Power to gas	0	45 - IDM + Gas	
			Net Enera gain
Net result	DAM - IDM	DAM - IDM + Gas	Gas
Public money	-90	DAM - 90 - 45	DAM - 45